OPEN LETTER

Check for updates

REVISED Family planning science and practice lessons from the

2018 International Conference on Family Planning [version 2;

peer review: 3 approved]

Jean Christophe Rusatira¹, Claire Silberg², Alexandria Mickler², Carolina Salmeron¹, Jean Olivier Twahirwa Rwema³, Maia Johnstone², Michelle Martinez², Jose G. Rimon¹, Linnea Zimmerman¹

¹Bill & Melinda Gates Institute for Population and Reproductive Health, Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, 21205, USA

²Department of Population, Family and Reproductive Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, 21205, USA

³Department of Epidemiology, Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, 21205, USA

* Equal contributors

V2 First published: 27 Apr 2020, 4:43 https://doi.org/10.12688/gatesopenres.13130.1 Latest published: 02 Mar 2021, 4:43 https://doi.org/10.12688/gatesopenres.13130.2

Abstract

Background

Since 2009, the International Conference on Family Planning (ICFP) has served as an opportunity for the global reproductive health community to share FP advances and practice lessons in the areas of research, programming, and advocacy. The purpose of this paper was to synthesize the key results and findings presented by members of the FP community at the 2018 ICFP Conference.

Methods

More than 700 abstracts from all 15 conference tracks were reviewed and 64 abstracts total were selected for this paper based on the novelty and urgency of the findings. The content analysis of conference abstracts were grouped into six final thematic areas.

Results

1) Investing in family planning for a lifetime of returns. FP continues to face a shortage of funding. Domestically based and locally owned funding models provide alternative financing solutions. 2) Addressing inequities in family planning for key populations. Various populations still face challenges in accessing FP. Youth-inclusive and user-centered programming show promise in addressing such challenges. 3) Reproductive justice, Unsafe abortions tend to be more common among younger, poor, uneducated and rural women. Legislation is still needed to facilitate a culture of safe abortions. 4) Couple dynamics



Open Peer Review

1. Ann Biddlecom (D), Guttmacher Institute, New York City, USA

2. **Nguyen Toan Tran**, University of Technology Sydney, Sydney, Australia

University of Geneva, Geneva, Switzerland

3. **Gillian Mckay** D. London School of Hygiene and Tropical Medicine, London, UK

Any reports and responses or comments on the article can be found at the end of the article.

and decision-making. Couples who share equitable responsibility in decision-making processes are more likely to use contraceptives; couple disagreement influences women's decisions to covertly use FP. 5) *Male involvement in programming.* Male champions can successfully promote uptake of FP. Gender-transformative programming promotes gender equity and impacts behavior change. 6) *Breakthroughs in novel contraceptives and systems improvement in family planning.* Recent advances include user-centered contraceptive technologies that allow for self-administration and information systems which optimize supply chain management.

Conclusion

The research, advocacy, and programmatic abstracts at ICFP 2018 highlighted research advances, showcased implementation science wins, and provided evidence of critical knowledge gaps in global FP access and use

Keywords

Family planning, return on investment, women empowerment, reproductive rights, reproductive health, gender empowerment, contraceptive technology

This article is included in the International

OFFAMILY PLANNING Conference on Family Planning gateway.

Corresponding author: Jean Christophe Rusatira (jcrusatira@jhu.edu)

Author roles: Rusatira JC: Conceptualization, Data Curation, Methodology, Project Administration, Writing – Original Draft Preparation, Writing – Review & Editing; Silberg C: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Mickler A: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Twahirwa Rwema JO: Conceptualization, Data Curation, Methodology, Writing – Original Draft Preparation, Writing – Review & Editing; Twahirwa Rwema JO: Conceptualization, Data Curation, Methodology, Writing – Original Draft Preparation, Writing – Review & Editing; Johnstone M: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Johnstone M: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Martinez M: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Martinez M: Conceptualization, Data Curation, Writing – Original Draft Preparation, Writing – Review & Editing; Conceptualization, Funding Acquisition, Supervision, Writing – Original Draft Preparation, Writing – Review & Editing; Zimmerman L: Conceptualization, Methodology, Supervision, Writing – Original Draft Preparation, Writing – Review & Editing

Competing interests: No competing interests were disclosed.

Grant information: The International Conference on Family Planning was supported by the Bill & Melinda Gates Foundation grant number [OPP1181398].

The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Copyright: © 2021 Rusatira JC *et al*. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

How to cite this article: Rusatira JC, Silberg C, Mickler A *et al.* Family planning science and practice lessons from the 2018 International Conference on Family Planning [version 2; peer review: 3 approved] Gates Open Research 2021, 4:43 https://doi.org/10.12688/gatesopenres.13130.2

First published: 27 Apr 2020, 4:43 https://doi.org/10.12688/gatesopenres.13130.1

REVISED Amendments from Version 1

We have amended the paper to address the comments from the reviewers.

Abstract section:

We have re-written the abstract to improve readability and clarify the thematic grouping process of the 15 tracks into 6 themes and to address other comments made by the reviewers.

Introduction section:

We have included more context on the theme.

Lessons from ICFP 2018 section:

We have made edits to address various comments to expand on the demographic dividend framing and human rights-oriented framing. We have also incorporated more information on the investments and political environment necessary to harness the DD.

We have revised the Male Involvement in FP Programming section and provided copyediting to make the section more succinct.

We have also made editorial copy editing to remove grammatical errors and improve the flow of the paper.

References section:

We have updated the reference list.

Any further responses from the reviewers can be found at the end of the article

Disclaimer

The views expressed in this article are those of the author(s). Publication in Gates Open Research does not imply endorsement by the Gates Foundation.

Introduction

The family planning (FP) community acknowledges that access to safe, high quality, voluntary family planning is a human right. However, the majority of girls and women, particularly in developing countries, continue to have limited and inequitable access to sexual and reproductive health rights, information, and services, including FP¹. Although more than 500 million couples in developing countries use FP, the United Nations estimates that by 2030, nearly 200 million women seeking to delay or avoid having a birth will have an unmet need for modern contraception². This demand will likely continue to grow as record numbers of young people enter the prime reproductive ages in the decades to come. It is thus essential that the family planning community identifies high impact approaches to address the major barriers and gaps affecting equitable access to quality family planning.

Since its inception in 2009, the International Conference on Family Planning (ICFP) has served as a strategic inflection point for the FP and reproductive health community worldwide. ICFP serves as an international forum for scientific and programmatic exchange that enables the sharing of available findings and the identification of knowledge gaps, in addition to facilitating the use of new knowledge to transform policy. At the London Summit in 2012, the global FP community set an aspirational goal to enable 120 million more women and girls to access voluntary quality FP by 2020, and the FP community broadened that goal to include universal access to reproductive health care and services by 2030^{3,4}. The ICFP has been an important, collaborative effort in the buildup to establishing that goal, raising visibility, creating momentum around FP, and leading to concrete changes in policy and programs.

The 2018 ICFP, held in Kigali, Rwanda, was centered on the overarching theme, "Investing for a Lifetime of Returns". This theme was chosen because of the essential role of FP for the realization of all 17 Sustainable Development Goals (SDGs) and spoke to the various returns that investments in FP provides - from better sexual and reproductive health outcomes and improvements in maternal and child health, to education and women's empowerment, to long-term environmental benefits and socio-economic growth⁵. Over 700 oral presentations were featured at the conference and covered FP advocacy wins, services developments, and research. Oral presentations were grouped into the following conference tracks: 1) Returns on investment in family planning and the demographic dividend; 2) Policy, financing, and accountability; 3) Demand generation and social and behavior change; 4) Fertility intention and family planning; 5) Reproductive rights and gender empowerment; 6) Improving quality of care, 7) Expanding access to family planning; 8) Advances in contraceptive technology and contraceptive commodity security; 9) Integration of family planning into health and development programs; 10) Sexual and reproductive health and rights among youth and adolescents; 11) Men and family planning; 12) Family planning and reproductive health in humanitarian settings; 13) Faith and family planning; 14) Urbanization and reproductive health; 15) Advances in monitoring and evaluation methods. This paper summarizes the highlights of the scientific program and identifies key findings presented during the oral sessions in the fields of research, programming, and advocacy in order to inform future work in these fields.

The findings summarized in this paper are from 64 abstracts from individual and preformed panel submissions accepted for oral presentations at ICFP 2018. Each co-author of this paper reviewed abstracts from up to three conference tracks based on their expertise and provided summaries from these tracks, organized by emerging key themes. The final abstracts were selected for inclusion in this paper based on the novelty of the findings and contribution to the FP field. These summaries were incorporated to develop the final draft of the paper.

Lessons from ICFP 2018

Investing in family planning for a lifetime of returns

Measuring the returns on investments in FP is crucial for continued funding and support for FP programs. The business cases for FP presented at ICFP demonstrated the ways in which cost-effective FP programming may save money in the short-term and long-term at the individual, community, donor, and national levels. Willcox and colleagues developed a model based on 47 county referral hospitals in Kenya, which demonstrated that for every dollar invested in training and equipment for implant removal services, a future return of USD \$1.62 would be accrued from the economic benefits of continued implants uptake6. Costing data presented by Tumusiime and colleagues found that in Senegal and Uganda, the total costs-including direct medical costs (i.e. provider time, supplies, drugs), costs of self-injection training (based on a one-page instruction sheet scenario), and direct non-medical costs (i.e. client travel and time costs)-are significantly lower for the selfinjection of depot medroxyprogesterone acetate administered subcutaneously (DMPA-SC) as opposed to provider-administered injectables7. In Nigeria, Adedeji and colleagues found that for every \$1 invested in high-impact intervention-focused FP programs, an estimated \$1.40 may be saved on maternal and newborn care, and another \$4 could be saved on treating complications from unplanned pregnancies8. While self-administered DMPA-SC may provide a cost-effective approach to improving access to long-acting reversible contraceptive (LARC) methods, a study conducted in Rwanda identified LARCs to be more cost-effective than non-LARC methods post-partum, with a savings of \$31.42 per pregnancy averted for two years following birth, and additional cost savings expected over longer time frames9.

FP may also be a catalyst for the demographic transition and an opportunity to realize the benefits of the demographic dividend. The demographic dividend describes the changes in the population age structure caused by reductions in populationlevel fertility and mortality rates. These structural population changes result in a large working-age population and a smaller number of youth dependents¹⁰. With the correct set of political, economic, educational, and employment policies and opportunities, countries characterized by this population age structure have the potential to take advantage of the large working age population to bolster socio-economic development and create generational wealth¹¹. Furthermore, this demographic transition may help countries achieve SDG targets. Modeling has shown that FP investments can positively affect SDGs across several sectors including health, governance, economic growth, agriculture, and education^{12,13}. Despite improvements in FP funding and financing, expanded financial investments in FP are still needed throughout much of sub-Saharan Africa in order to successfully reach the FP targets necessary for countries to reap their demographic dividend potential^{14,15}.

Strategies to sustain FP advances include long-term financing for FP, particularly the transition from donor-dependent financing to locally owned initiatives. Donor funding to support FP continues to fall short of the amount needed to address the unmet need of family planning globally and the extent of this gap varies significantly across countries and regions¹⁶. To mitigate the impact of this shortage in donor funding, it is critical for countries to plan for shifts in financing options, including the procurement of finances for subsidized commodities. Locally owned community-based health insurance (CBHI) schemes, characterized by voluntarily pooled funds, may be a promising option in order to sustain FP financing¹⁷. Research on CBHI schemes from sub-Saharan Africa showed positive effects on healthcare utilization and FP uptake. In Ethiopia, Pathfinder International found that women who were enrolled in a CBHI scheme were 1.3 times more likely to practice modern FP than those who were not enrolled¹⁸. Since 2014, the Ethiopian government has slowly shifted away from donor-dependence and has launched and expanded the number of CBHI and social health insurance (SHI) programs in more than one-third of districts. Based on current projections, by 2025, the number of modern contraceptive users in Ethiopia will have doubled from 6 million to 12 million, and the private sector will account for 40% of them¹⁹.

Data gleaned from nationally representative datasets showed a similar global pattern in factors associated with FP utilization. Findings from the Ethiopia (2016), Kenya (2014), Nigeria (2013), and Philippines (2013) Demographic Health Surveys (DHS), as well as Indonesia's 2015 Susenas survey, revealed trends in the number of insured women and the modern contraceptive prevalence rate (mCPR); specifically, the ratio of mCPR between insured versus uninsured individuals was greatest among women of the lowest socioeconomic status (SES) in the Philippines, Kenya, Indonesia, and Ethiopia²⁰⁻²³. Insurance coverage was shown to be directly associated with FP utilization. These findings signify the importance of comprehensive health insurance for FP access, particularly amongst marginalized groups²⁴. Another important finding related to FP access and insurance showed how national health priorities supersede FP access. While FP is often included under universal health coverage (UHC) schemes, the inclusion of FP is often not operationalized or realized²⁵. Data from 22 priority FP2020 countries showed that the challenges to comprehensive UHC include government prioritization of less cost-effective yet urgent curative services, instead of preventive care or primary services²⁶.

Additionally, research on health financing highlighted opportunities for new financing models and insurance schemes. In Tanzania, the United Nations Fund for Population Activities (UNFPA) and DKT International implemented an innovative micro-insurance scheme for urban youth and adolescents, which demonstrated high uptake in just one year of initiation. This program, "iPlan", required a nominal annual fee of \$10, after which an individual received comprehensive sexual and reproductive health (SRH) services including contraceptive counseling and commodities for one year²⁷. Similarly, researchers found that the Public-Private Partnership Health Posts model in Rwanda was a cost-effective and viable solution for individuals living more than 60 minutes away from health facilities²⁸. The social franchising model created by the Family Health Guidance Association of Ethiopia (FGAE) was also shown to be a cost-effective model as compared to static clinics. When compared to the FGAE-owned static clinics, the cost per Couple Years of Protection (CYP), (an indicator used to estimate protection from pregnancy by family planning/contraceptive methods during a one-year period)²⁹ was significantly less expensive. CYP provided through the FGAE social franchise model was estimated to be between USD \$0.73-\$1.77, compared to USD \$25.61-37.35 per CYP provided at the FGAE-owned static clinics³⁰.

Addressing inequities in family planning for adolescents, youth, and key populations

Inequities in access to FP exist across women from different socio-economic groups, age cohorts, health statuses, and physical abilities. Compared to women of other reproductive ages, adolescent girls and young women (AGYW) have specific FP and sexual and reproductive health needs, including low contraceptive uptake, high risk of unintended pregnancies and unsafe abortions, high risk of sexually transmitted infections, and a greater risk of acquiring HIV^{31,32}.

Involving youth in advocacy and programming efforts was shown to be critical in order to ensure that their unique FP needs are met. Reproductive Health Uganda developed an innovative program to support young people in realizing their right to hold state-actors accountable for improving access to youth-friendly health services. The initiative led to the successful allocation of county-level funds for youthfriendly services in all sectors and created a network of youth advocates for FP programming³³. In Kenya, the Network for Adolescents and Youth of Africa developed a holistic advocacy network in Kisii County that led to the allocation of KES 7,000,000 (USD 68,000) to contraceptive procurement and FP services in the financial year 2016/2017, the first time a line item for FP was included in the county budget³⁴.

FP programs for youth with hearing and speech impairments included a sexual health education program for adolescents in Vietnam and a social media literacy program integrating SRH and FP information exchange in Burkina Faso^{35,36}. In Egypt, Love Matters Arabic Project was launched to engage young people on SRH issues, dispel myths and taboos, and improve access to accurate and reliable SRH and FP information³⁷. Some researchers maintain that to attract youth and gain their trust, programming must include a pleasure component and tie this information to healthy sexual behaviors and practices^{29,38}. This hypothesis needs further exploration in future research and programming.

Other key populations highlighted during the conference included youth living in conflict zones, people living with HIV, women with disabilities, female sex workers, people who use drugs, individuals with a low socioeconomic status, and individuals who do not identify as heterosexual^{39,40}. A nationally-representative survey from Ethiopia found that more than 95% of women living with a mental, physical, or visual disability face obstacles in physically accessing health facilities and are less likely to have access to FP information³⁸. Furthermore, this sub-population may be more likely to face discrimination by healthcare providers. These barriers to FP services and knowl-edge may have direct consequences on health outcomes. For example, among women with disabilities who have ever had a pregnancy, more than 85% reported that the pregnancies were unintended⁴¹.

Studies from conflict zones in Afghanistan, Cameroon, Liberia, Sierra Leone, and Yemen showed that girls who marry before

the age of 18 have lower rates of FP use, less intention to use in the future, and a significantly higher risk of unintended pregnancy, compared to married women 18 years of age and older⁴². Among Somali refugee girls aged 10–19 and living in Ethiopia, nearly 75% of girls were aware of how to become pregnant, but fewer were aware of the risks associated with inadequate birth spacing. Despite nearly one in five girls having already given birth, 40% of participants remained unaware of methods to avoid pregnancy⁴³.

People living with HIV may also have trouble accessing comprehensive FP services. A study from Uganda found that unmarried women with an HIV-positive status and women of high parity were significantly less likely to use FP post-partum⁴⁴. Women who take antiretroviral therapy have desires to bear children, learn about contraception, and receive information on methods to prevent mother-to-child transmission of HIV45. To this end, it is important that programs recognize this population's unique desires and needs. A program in London demonstrated the promise of service integration to improve access to FP for women living with HIV; Mabonga and colleagues found a 50% increase in LARC use after the integration of FP and HIV services in a postnatal contraception clinic in London⁴⁶. Integrating HIV and FP services into one convenient location helps promote healthy SRH and child health outcomes, while also easing client burden associated with traveling between different clinics.

Reproductive justice: Abortion care, family planning, and women's wellbeing

Unsafe abortions have emerged as one of the key neglected public health problems, accounting for more than 1 in 10 maternal-related deaths worldwide⁴⁷. Accordingly, abstracts discussing safe abortion access and FP were cross-cutting through the conference's tracks. Research on unsafe abortions underscored the determinants of abortion practices as well as inequities in the accessibility of safe abortion services. For example, in both Nigeria and Rwanda, younger, uneducated women in rural areas are more likely to seek out and use abortion services. However, due to restrictive abortion laws, these abortions are often unsafe, which poses not only health challenges but legal challenges as well⁴⁸. In 2012, 24% of all incarcerated women in Rwanda were imprisoned for participating in clandestine, illegal abortions⁴⁹. Access to safe abortion services is a critical component of comprehensive SRH yet continues to be heavily restricted in many parts of the world. Several authors called for targeted advocacy for legal provisions to ensure the availability of safe abortion services^{50,51}. Amendments to national laws, increased and expanded training of providers, and improved access to medical abortions were highlighted as priorities for policymakers^{24,52}. Furthermore, emphasis was placed on the recognition of social disparities and inequities in abortion prevalence and access⁴⁵.

Analyses of post-abortion care (PAC) programs for women in humanitarian settings in DRC and Yemen found that providers may effectively shift from unsafe practices of dilation and curettage (D&C) to manual vacuum aspiration and medical treatment with misoprostol. Over a period of 5 years, the percentage of PAC clients requiring evacuation who received D&C as treatment was reduced from of 18.6% to 2.0% in DRC and from 25% to 2.8% in Yemen⁵³.

Expanding access to safe abortion services can also directly increase women's access to FP. Research from Kenya found that, regardless of pregnancy intentions, over 70% of women who attended PAC initiated contraceptives during their PAC visit⁵⁴. Analyses of post-abortion family planning (PAFP) service delivery across two states in India also revealed that 28% of women adopted a contraceptive method within two months after their abortion⁵⁵. Another study from Kenya found that women's PAFP method varied based on the type of abortion the woman experienced. While women who had undergone surgical abortions were more likely to choose intrauterine devices or other LARC methods, women who had medical abortions were more likely to choose implants. While this may be due to the fact that IUDs can be inserted following a surgical abortion but not following a medical abortion, further research is necessary to ensure women receive the FP method that best suits their needs, preferences, and fertility desires⁵⁶. Insights into context-specific ideals of family size as well as abortion care-seeking behaviors are important in understanding how to improve future PAFP service delivery and increase contraceptive use⁵¹.

Couple dynamics and family planning decision-making

Research on women's covert use of FP underscored the ethical tensions between supporting and validating women's ability to exercise reproductive autonomy without disclosure to a partner while also striving to engage male partners in reproductive health decisions⁵⁷. Research revealed that a woman's decision to covertly use FP may be linked to discordant partner views on childbearing and fertility desires⁵⁸. One study found that when men expressed beliefs that contraception is "women's business", women were more likely to engage in covert use and not disclose their FP decisions to their partners⁵³. However, women who use FP covertly often struggle with the cost of contraceptives and worry about concealing FP from their partners⁵³. Power dynamics continue to influence FP use, even when women choose to use FP methods covertly.

Couple power dynamics and household decision-making also influences FP utilization. Easterlina and colleagues found that 75% of women in West Pokot, Kenya, identified their husband or partner as the biggest barrier to voluntary FP use⁵⁹. In the Afar region of Ethiopia, 58.8% of women reported not having the freedom to make independent fertility decisions⁶⁰. Conversely, researchers have found that the odds of using modern contraception increases significantly when couples make decisions together⁶¹. Couples who reported shared decision-making on everyday life choices (e.g. financial decisions) in Ibadan, Nigeria, were more likely to report using FP than couples in which decisions were made solely by the husband⁶². Other factors which have been found to influence FP uptake include the educational status of couple dyads, couple's knowledge of reproductive health and rights, women's economic security and involvement in microcredit schemes, and gender equitable household dynamics^{63,64}.

Male involvement in family planning programming

Considering men's influence on FP decisions, involving male partners in FP programming is essential to meeting FP goals globally. Males have a desire to learn about FP and contraception but often have limited or inaccurate information which fuels false beliefs and myths. In Uganda, when men were asked why they do not allow their wives to use modern FP methods, participants expressed fears that their wives were likely to become promiscuous if they began using contraception. The researchers also found that male participants' beliefs about FP were often inaccurate, inconsistent, or grounded in gendered stereotypes, fueling fears about wives' promiscuity⁶⁵. Similarly, research from Kenya showed that 50% of men in Western Kenya lack accurate knowledge on the possible benefits of healthy timing and spacing of pregnancies⁵⁵. In Nepal, men's limited understanding of contraceptives were shown also to impact their partner's uptake of IUDs⁶⁶.

Research revealed the potential of male champions and advocacy networks in changing social norms, educating male peers, and creating a culture receptive and open to family planning discussions. In Uttar Pradesh, India, a community-based information diffusion strategy was used to dispel FP myths and misconceptions and provide comprehensive information on non-scalpel vasectomy. To accommodate the diverse lives of men living in informal settlements, men were engaged by their peers at traditional male gathering points at convenient times, such as evening meetings for rickshaw pullers⁶⁷. In Zamboanga City, Philippines, a packaged community-based learning program, EL HOMBRE, used a peer-to-peer information dissemination technique to share information related to FP, family matters, and family planning⁶⁸. Similarly, a male champions program was rolled out successfully in Western Kenya, where 50 male champions held sensitization forums once a month to encourage discussions on healthy timing and spacing of pregnancies55. In Benin, USAID/ANCRE implemented a "men as advocates" intervention that included counseling male spouses on FP when their partners left the maternity ward and creating groups of "committed men" to sensitize male peers. Over the course of a year, post-partum FP counseling for males increased by more than 100% across 47 health facilities⁶⁹.

Couple-based approaches to behavioral change and FP uptake also show promise. Project Concern International implemented a social and behavioral change program that used couples as community change agents to address restrictive social norms and SRH myths, improve couple communication strategies, and aid couples in the development of their FP and fertility goals⁷⁰. The Emanzi program in Uganda also showed a positive changes in equitable gender norms, a rise in shared decision-making in the household, and a significant increase in FP uptake⁷¹.

Gender-transformative programming is grounded in the notion that changes in gendered norms, beliefs, and behaviors lead to positive health outcomes. Landmark gender-transformative programs included the Bandebereho intervention in Rwanda, which consisted of 15-week group education meetings for more than 4,000 young adult men and women and 1,700 expectant and new fathers and couples. When compared to the control group, findings showed an increase in the proportion of young people who had sought SRH services, as well as changes in positive gender norms and increases in shared decision-making⁷². The GroupUp Smart education curriculum in Rwanda targeted prepubescent male and female adolescents and their parents. The program found that adolescent boys' awareness of preventing pregnancy increased from 65% to 81% and their knowledge of reproductive health significantly increased. Compared to pre-intervention, adolescent boys experienced significant increases in gender equity scores, pointing to the notion that SRH education which includes a gender component may be more beneficial than SRH education alone, particularly when introduced earlier in life⁷³.

Breakthroughs in novel contraceptives and systems improvement in family planning

Research advances in contraceptive technology highlighted the importance of beginning with the end-user in mind. In Nigeria and India, initial acceptability research of a microneedle contraceptive patch (MNP) explored client perceptions of the method and quantified desired MNP attributes. Across both contexts, prospective users liked the potential for self-application and both providers and clients found the method to be easily used. Researchers also wanted to identify user preferences for other attributes, including the method's effect on menstruation, duration of effectiveness, placement location, pain, and the potential for skin reactions at the application site⁷⁴. These findings underscored high overall acceptability of microneedles as a novel delivery method, yet also emphasized the importance of reducing side effects associated with existing contraceptive methods.

Use of the levonorgestrel intrauterine system (LNG-IUS) has risen rapidly in high-income countries and is one of the most effective forms of contraception available. However, the cost of the method is typically a barrier to clients in lowincome countries. Research by Marie Stopes International Nigeria and FHI360 piloted the introduction of an affordable version of the LNG-IUS at multiple service delivery points and found that users, providers, and key opinion leaders were receptive and enthusiastic about the method. Many clients also reported reduced menstrual bleeding as a key non-contraceptive benefit of the method. This research also suggested that a multi-stakeholder approach, including coordinated demand-generation activities, may be important in order to advance the scale-up of LNG-IUS in Nigeria and in other similar contexts⁷⁵.

Improved access to subdermal implants and other long-acting methods like IUDs have raised concerns on whether women can access timely removal services on-demand. Data from pilot studies examining the subdermal implant removal tool, RemovAid, suggested that this novel device is safe to proceed to larger studies, and with it, physicians can safely remove one-rod implants and minimize the removal time to just under seven minutes⁷⁶. Furthermore, initial acceptability research revealed that a novel postpartum IUD inserter would be attractive in India due to high unmet need and a lack of trained providers⁷⁷. These products would not require additional supplies, aside from what it's packaged with, and demonstrated high client and provider satisfaction.

Novel approaches to service delivery and contraceptive commodity procurement included the development of an "informed push" model, which would change the public health sector's reporting system to allow for consolidated transport routes and combined supply delivery. Rather than following a typical model where an individual health facility is responsible for FP commodity reporting, product requisition, and pick-up, this model relied on health "zone staff" to optimize transport routes and report on stockouts and product consumption. By consolidating FP commodities alongside other health products and optimizing transit routes, the study demonstrated a substantial reduction in the incidence of stockouts and a decline in transit costs⁷⁸. In India, an application developed by the Ministry of Health and Family Welfare also seeks to collect consumption data, forecast demand, and track commodity distribution. While still in the formative stage, individual states have demonstrated an interest in customization of the app per state to allow the government to improve commodity distribution and transfers by tracking "live" data⁷⁹.

Lastly, algorithm-based fertility apps, such as the Dynamic Optimal Timing application, demonstrated a typical-use failure rate that was comparable to or better than other user-initiated methods, including fertility-awareness based methods. This method delivered consistently correct information to women about their daily fertility status, which suggests that the app could allow women to self-manage fertile days to avoid pregnancy⁸⁰.

Discussion

The 2018 ICFP scientific program underscored new advances in family planning research, programs, and advocacy work, that have important practical and policy implications. Shortand long-term benefits of FP investments were highlighted, from increased empowerment at both the individual and couple levels to reduced maternal mortality and improved population health. Nevertheless, achieving these dividends as a result of FP investments continues to be thwarted by insufficient funding, limited contraceptive choices, and persistent inequality in accessing FP programs and services.

The growing reproductive-age population, particularly in developing countries, and the increasing demand for FP requires innovative financing initiatives to meet the demand and ensure resilient health systems. Community-based health insurance schemes and public-private partnerships between the Ministries of Health and local businesses are promising

While progress is being made globally on improving access to contraceptive services, urgent actions are required to address the FP needs of specific subpopulations that lag behind. These populations include AGYW, female sex workers, women and girls with disabilities, women living with HIV, and populations living in conflict-afflicted regions as well as other humanitarian settings. Research focusing on such populations is becoming increasingly highlighted at ICFP but remains very limited compared to research and program efforts focused on other populations. Future research should explore the needs of such unique sub-populations and evaluate interventions and programs that may successfully be scaled to address the FP needs of these marginalized groups. Gender and social norms continue to play a key barrier in FP demand generation. Further research is needed to evaluate the effectiveness of gender transformative programs that aim to address gender norms that perpetuate social and health inequalities. Empowerment efforts need to continue to engage men as partners while considering women's autonomy in FP decisions, and ensure that context-specific couple dynamics and social norms are integrated into programming.

Despite achievements and advances in FP access and utilization, the abortion space still lags behind. Unsafe abortions and abortion-related fatalities remain a neglected and preventable public health problem. Current and future advocacy efforts should focus on the legal provision of abortion care to ensure the availability of safe, decriminalized abortion services. Such efforts should be undertaken in parallel with expanded training for providers, while utilizing the opportunities to integrate FP methods in post-abortion care. To further understand PAC, future research is needed to determine what influences a woman's decision to use contraceptives post-abortion and the specific method choice selected, and why.

Continued improvements in information systems have allowed for the rapid reporting of inventories, consolidated transport routes, and combined supply delivery. Such systems present an opportunity to address supply chain challenges and prevent stock-outs from the sub-national to the national levels. Artificial intelligence and algorithm-based applications present opportunities for FP information access through mobile user technologies. Allowing such systems to communicate with the supply chain may allow women to better access their contraceptive method of choice and allow couples to achieve their desired family size.

Implementation science research should also focus on understanding the key drivers that affect the uptake of research findings. This research can be used to inform evidence dissemination and utilization by policymakers and other decisionmakers at the local and national levels. FP is not only a social justice issue, but a smart investment for individuals and communities. Ensuring that local leaders and policymakers properly understand these two rationales for FP could be key to success for the global community and may lead to more prosperous and resilient communities. Over the last few years, the concept of the demographic dividend has provided a broader ground for advocates to support FP efforts. The economic theory of the demographic dividend tends to resonate well with policymakers and peoples from various religious backgrounds, including religious leaders. Nevertheless, challenges remain for the human-rights rationale to be as widely accepted as the economic theory.

Conclusion

ICFP 2018 generated rich evidence on successes achieved in recent years and highlighted continued gaps in research, implementation and advocacy. Science and practice lessons demonstrated the need for a multi-sectoral, interdisciplinary approach among FP stakeholders in order to inform new actions to attain the 2030 universal access goal. The universal access goal presents an opportunity for the world to close the gap in FP inequities between individuals of different socioeconomic backgrounds and attain shared prosperity across communities. Investing in FP paves the path for generational wealth and a range of health returns. Addressing FP advocacy, services, and research challenges and continuously sharing lessons learned and best practices through platforms such as ICFP will be essential for countries to accelerate progress towards the universal access goal and ultimately, meet the needs of all women and girls.

Data availability

All data underlying the results are available as part of the article and no additional source data are required.

References

- Boerma T, Requejo J, Victora CG, et al.: Countdown to 2030: tracking progress towards universal coverage for reproductive, maternal, newborn, and child health. Lancet. 2018; 391(10129): 1538–1548.
 PubMed Abstract | Publisher Full Text
- United Nations, Department of Economic and Social Affairs, Population Division: World Family Planning 2017 - Highlights (ST/ESA/SER.A/414). 2017. Reference Source
- Brown W, Druce N, Bunting J, et al.: Developing the "120 by 20" goal for the Global FP2020 Initiative. Stud Fam Plann. 2014; 45(1): 73–84.
 PubMed Abstract | Publisher Full Text
- UN (United Nations): Transforming our world: The 2030 Agenda for Sustainable Development. Accessed 19 August 2020. 2015. Reference Source
- 5. Starbird E, Norton M, Marcus R: Investing in family planning: key to

achieving the sustainable development goals. Glob Health Sci Pract. 2016; 4(2): 191-210.

PubMed Abstract | Publisher Full Text | Free Full Text

- Willcox M, Kariuki E, Nyaga FK: System dynamics modeling of quality care for implant removal services: a cost-benefit analysis of investments in health 6 workforce competence and equipment availability. Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Tumusiime J, Ba M, Morozoff C, et al.: What is the price of innovation? 7. Costs and cost-effectiveness of self-administered DMPA-SC (Sayana Press) compared to health worker-administered DMPA-IM in Uganda and Senegal. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Adedeji O, Keita D, Afolabi K, *et al.*: **Business Case for Investing in FP in Nigeria 2018 to 2020 Cost benefit analysis**. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP 8. Program.

Reference Source

- Williams P, Tummala A, Morales K, et al.: Is post-partum FP uptake for 9 married women of reproductive age (12-49 years) in Rwanda cost effective for a lifetime horizon from a health system perspective? Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Bloom D, Canning D, Sevilla J: **The demographic dividend: A new perspective** on the economic consequences of population change. Rand Corporation. 10. 2003. **Publisher Full Text**

Lee, R, Mason A: Reform and support systems for the elderly in developing 11. countries: capturing the second demographic dividend. Genus. 2006; 62(2): 11-35 **Reference Source**

- Ntibanyurwa A, Habarugira V, Alemu D, et al.: Unlocking Youth Potential 12. to Harness the Demographic Dividend (DD): Evidence from National Demographic Dividend profile in Rwanda. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Sacher S, Jurczynska K, Moreland S, et al.: To what extent can FP boost 13. achievement of the Sustainable Development Goals? Introducing the FP-SDGs Model and regional results. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Ndizeye S, Placid M, Tagoola F, *et al.*: **The Investment Case for FP in Uganda**. Paper presented at: 5th International Conference on FP (ICFP); November 14. 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Thompson L: Fertility, Population Growth and the Economic Impacts of 15. Child Marriage. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Grollman C, Cavallaro FL, Duclos D, et al.: Donor funding for family planning: levels and trends between 2003 and 2013. Health Policy Plan. 2018; 33(4): 574-582

PubMed Abstract | Publisher Full Text | Free Full Text

- Ekman B: Community-based health insurance in low-income countries: a 17. systematic review of the evidence. Health Policy Plan. 2004; 19(5): 249-270. ubMed Abstract | Publisher Full Text
- Kassie G: **The effect of community-based health insurance on modern FP utilization in Ethiopia**. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. 18. **Reference Source**
- Fagan T, Prabhakaran S, Dutta A: Beyond FP2020 Commitments: How Can 19. Ethiopia Mobilize Domestic Resources to Scale-Up and Sustain Access to FP Services as Part of its Efforts to Achieve Universal Health Coverage? Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Central Statistical Agency/CSA/Ethiopia and ICF: Ethiopia Demographic and 20. Health Survey 2016. Addis Ababa, Ethiopia, and Rockville, Maryland, USA: CSA and ICF. 2016 **Reference Source**
- Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS 21. Control Council/Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International: **Kenya Demographic and Health Survey 2014**. Rockville, MD, USA: Kenya National Bureau of Statistics, Ministry of Health/Kenya, National AIDS Control Council/ Kenya, Kenya Medical Research Institute, National Council for Population and Development/Kenya, and ICF International. 2015. **Reference Source**
- National Population Commission NPC/Nigeria and ICF International: Nigeria 22.

Demographic and Health Survey 2013. Abuja, Nigeria: NPC/Nigeria and ICF International, 2014. **Reference Source**

- Philippine Statistics Authority PSA and ICF International: Philippines National 23. Demographic and Health Survey 2013. Manila, Philippines: PSA and ICF International. 2014. **Reference Source**
- Ross R, Fagan T, Dutta A: Is Health Insurance Associated with Improved FP 24. Access? A Review of Household Survey Data from Seven FP2020 Countries. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Coolen A, Boddamn-Whetham L: Financing for equity and choice: finessing 25 FP inclusion in Ghana's National Health Insurance. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program.

Reference Source

- Holtz J: Family Planning and Universal Health Coverage: Together or Apart? 26 Paper presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Kabba-Kebbay J, Richard Nkanda E: **An Innovative "Health Insurance Plan" to Reach University Students with SRH services through social marketing.** Paper presented at: 5th International Conference on FP (ICFP); November 27. 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- 28. Eagan A, Gashumba D, Gahungu Z, et al.: Expanding access to FP services in Rwanda through public and public-private partnership health posts. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Darroch JE, Singh S: **Estimating unintended pregnancies averted from couple-years of protection (CYP).** New York: Guttmacher Institute, 2011; **1**(10). **Reference Source** 29
- Haile GM, Girma EM, Riro SM: FP Through Franchised Private Clinics: The Case of Family Guidance Association of Ethiopia. Paper presented at: 5th 30 International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Na W: Attitude towards LARC among 15-19 year olds adolescents who were seeking induced abortion in China. Abstract presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**

- Adeniyi F, Francis E, Femi A, et al.: What dictates the timing of first use of 32. modern contraceptives? Survival Analysis of Time to Uptake of Modern Contraceptives among Never-Married Women in Nigeria, Mozambique, and Cote d'Ivoire. Abstract presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Mugenyi S, Wasswa H, Tayebwa E: Nothing About Us, Without Us: Expanding Access to FP/SRH Services Through Youth-Led Social Accountability. Paper 33 presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. Reference Source
- Oliech I: Harnessing effective partnership for advocacy: A case of FP Advocacy in Kisii County. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. 34. **Reference Source**
- Bedoui R: Disability inclusive comprehensive sexuality education for 35 Vietnamese adolescents of Quang Tri Province. Abstract presented at: 5th International Conference on Family Planning (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Tao O: Tribune santé ados et jeunes : une plateforme pour renforcer l'accès des jeunes aux informations et services grâce aux réseaux sociaux. Abstract presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Ramy M: Love Matters Arabic innovative youth-oriented sexual education 37. toolkit. Abstract presented at: 5th International Conference on Family Planning (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- van Clief L: How Pleasure drives traffic and trust of youth online at Love 38. Matters. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Petraglia J, Abdoulaye O, Aliou S, et al.: **Innovations in behavior change** for adolescents and youth in Niger. Paper presented at: 5th International 39. Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- 40 Levy-Braide B, Ijaiya M, Fajola A, et al.: Uptake of FP Methods Amongst Women Living with HIV in Obio Cottage Hospital, in Rivers State, Nigeria.

Paper presented at: 5th International Conference on FP (ICFP); November 12-15: Kigali. Rwanda. ICFP Program. **Reference Source**

- Atnafu S: FP services utilization and its associated factors among women 41. with disabilities. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Singh R: FP and Unintended Births of Child Brides in Conflict Zones. Paper 42. presented at: 5th International Conference on FP (ICFP); November 12-15; . Kigali, Rwanda. ICFP Program. **Reference Source**
- 43. Karp C, Schlecht J, Myers A, et al.: Reproductive health and service knowledge of adolescent refugees and internally displaced persons (IDPs) in Ethiopia, Lebanon, and Myanmar. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Nakalema S, Nabaggala MS, Lamorde M, et al.: Predictors of FP use among 44. HIV positive post-partum women attending an urban HIV clinic. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Kahabuka C, Mbita G, Winani K, et al.: What are the FP and safer conception 45. needs of HIV-positive female sex workers in Dar es Salaam? Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Mabonga E, Taylor C, Brum R, *et al.*: **Does the introduction of a dedicated postnatal contraception clinic improve reproductive choices for HIV positive women?** Paper presented at: 5th International Conference on FP 46. (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Gebremedhin M, Semahegn A, Usmael T, et al.: Unsafe abortion and 47. associated factors among reproductive aged women in Sub-Saharan Africa: a protocol for a systematic review and meta-analysis. Syst Rev. 2018; 7(1): 130 PubMed Abstract | Publisher Full Text | Free Full Text
- Bell S, Omoluabi E, OlaOlorun F, et al.: Abortion Incidence and Safety in 48. Nigeria: Findings from a Population-Based Survey. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP

Program. Reference Source

Shipow A, Kagaba A, Mugeni N, *et al.*: **Understanding the Causes, Practices, and Consequences of Terminating Pregnancies: Experiences of Women Incarcerated for Illegal Abortion in Rwanda**. Paper presented at: 5th 49. International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source

- 50. Manning V,Gandhi M: From policy to action: expanding health worker roles for comprehensive abortion care in India. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Singh S: Incidence of abortion and unintended pregnancy in six Indian states: An overview of findings. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Tank J: Role of professional bodies in strengthening women's access to CAC services. Paper presented at: 5th International Conference on FP (ICFP); 52. November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Casey S,Gallagher M: Increasing use of manual vacuum aspiration 53. and misoprostol in in humanitarian settings. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Loi UR, Klingberg-Allvin M, Faxelid E, et al.: Pregnancy intention and post abortion contraceptive uptake: a cohort study in Kisumu, Kenya. Paper 54 presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Fancis Zavier AJ, Santhya KG, Khan N: Post-abortion contraceptive intentions and use among married young women in Rajasthan and Uttar Pradesh, India. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program **Reference Source**
- 56. Rank C, Gardezi L, Adalla D, et al.: Using client information systems to examine post-abortion FP uptake: Insights from Marie Stopes centres in Kenya. Paper presented at 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Biswabandita C: Concordant and Discordant report of Contraceptive Use by couples and its Association with Marital Relations and Men's attitude: Evidence from India, NFHS 2015-16. Paper presented at:5th International 57.

Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**

- Wood SN, Moreau C, Karp C, et al.: Covert use of FP among sub-Saharan 58 African women – reasons, challenges and consequences. Paper presented at:5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Moseti E, Kiprop C: From Barriers to Champions: Men take lead in 59 Advocating for Healthy Timing and Spacing of Pregnancy and FP in West Pokot County Kenya. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Gudu W, Bekele D, Awcash FS, et al.: The role of partners on fertility decision 60 and utilization of contraceptives among women in four emerging regions of Ethiopia. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Do M, Hutchinson P: **Attitudes, perceived norms and behaviors in FP** discussions with partner, and associations with contraceptive use among 61. young people in Nigeria. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Neetu J: The role of spousal participation in household decision-making 62. on contraceptive use among young couples in Ibadan, Nigeria. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Otupiri E, Apenkwa I, Ansong JK, et al.; Women empowerment and 63. contraceptive use in peri-urban Kumasi, Ghana. Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. Reference Source
- Lemma K: Factors influencing married women's decision-making power on Peproductive health and rights in Mettu rural district, South-West Ethiopia. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Hardee K, Ahaibwe G, Depio S, et al.: Men's Views of FP and their Access to 65. Services in Uganda. Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Sapkota S, Bhatt D, Lama R, et al.: 'I don't decide alone': Understanding 66. Decision-Making Pathways to IUCD Uptake Among Married Men and Women in Nepal. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- 67. Srivastava S, Behera S, Sharma V: Increasing Male Participation in FP in Uttar Pradesh, India. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Villano J: Experiential Learning Health Obligation of Men in the Barangay and Role in Women's Empowerment (EL HOMBRE). Paper presented at: 5th 68 International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Dunia G: Effective male engagement to increase FP uptake in Benin. Paper 69 presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. Reference Source
- Galvin L, et al.: A Community Couples Approach To FP Programming in 70. Bihar, India: A Case Study of Couple-to-Couple Engagement for Improved FP Practices. Paper presented at: 5th International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. Reference Source
- Wynne L, Mubiru F, Kirunda R, et al.: Emanzi a proven affective male engagement intervention designed for scale-up. Paper presented at: 5th 71 International Conference on FP (ICFP); November 12-15; Kigali, Rwanda. ICFP Program.

Reference Source

- Rutayisire F: Bandebereho: A gender-transformative comprehensive 72. intervention to promote sexual and reproductive health, reduce violence, and promote equality among young people and new and expectant parents. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Mukabatsinda M: Boys need to know this too: Improving puberty 73. awareness and gender equality among very young adolescents in Rwanda. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. **Reference Source**
- Brunie A, Callahan R, OlaOlorun F, et al.: What do women want? A mixedmethod study on potential user preferences for a contraceptive

microneedle patch in India and Nigeria. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source

- 75. Eva G, Nanda G, Rademacher K, et al.: Assessing Provision of the Levonorgestrel Intrauterine System in Nigeria. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12-15; Kigali, Rwanda. ICFP Program. Reference Source
- 76. Bratlie M, Iwarsson KE, Gemzell-Danielsson K, et al.: Hand-held device for removing a one-rod, subdermal contraceptive implant: results of a pilot study and future work. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- 77. Singh S: How to take innovation from conceptual idea to practice in the public health field- Emerging learning from India while introducing "Innovation Postpartum IUD (PPIUD) Inserter". Paper presented at: 5th

International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source

- Roijmans F, Yalaza M, Salumu F, et al.: Informed Push Model: a distribution model of FP commodities and medicines for low resource settings. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Khan NA, Sikdar SK: FP LMIS: Institutionalizing decision making, ensuring and strengthening commodity security and protecting client's rights. Paper presented at: 5th International Conference on FP (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source
- Jennings V, Shattuck D, Haile L: Expanding contraceptive choice with the Dot app: A proven, effective method for pregnancy prevention. Paper presented at: 5th International Conference on Family Planning (ICFP); November 12–15; Kigali, Rwanda. ICFP Program. Reference Source

Open Peer Review

Current Peer Review Status:

Version 1

Reviewer Report 27 July 2020

https://doi.org/10.21956/gatesopenres.14317.r29010

© **2020 Mckay G.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Gillian Mckay 🗓

Department of Global Health and Development, London School of Hygiene and Tropical Medicine, London, UK

Thank you for the opportunity to review this Open Letter that summarizes the key findings from the 2018 International Conference on Family Planning that was held in Kigali, Rwanda. The letter brings together 6 overarching themes drawing across the 15 tracks of the conference, to provide a concise yet comprehensive overview of the state of the evidence in family planning programming, advocacy and research.

I have some minor recommendations to improve the paper:

Methods:

- It was not clear to me how many panels there were at the conference. Were the 65 individual and preformed abstracts the sum total of the 700+ oral presentations made? If this was a sub-section, how were these abstracts chosen for inclusion?
- How did the process of thematic grouping of the 15 tracks into 6 themes take place?
- Include a line in the abstract around the methods.

General Comments:

- Quite technical language is used from time to time, which may be inaccessible to those outside of the FP space. e.g. Community Based Health Insurance & Couple Years of Protection: these terms could be better explained in the text or in a footnote.
- There are too many acronyms, many of which are only used once, therefore could likely be removed to make the paper easier to read.
- Some light copy-editing is needed for grammatical errors.

Is the rationale for the Open Letter provided in sufficient detail?

Yes

Does the article adequately reference differing views and opinions?

Yes

Are all factual statements correct, and are statements and arguments made adequately supported by citations?

Yes

Is the Open Letter written in accessible language?

Partly

Where applicable, are recommendations and next steps explained clearly for others to follow?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Reproductive health in humanitarian crises, with a focus on outbreaks of infectious disease.

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 22 Oct 2020

Jean Christophe Rusatira, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Dear Gillian,

Thank you for your thorough review of our paper. Please find below our responses to your comments in *italic* and marked with bullets.

Sincerely,

Jean Christophe Rusatira

Methods:

It was not clear to me how many panels there were at the conference. Were the 65 individual and preformed abstracts the sum total of the 700+ oral presentations made? If this was a sub-section, how were these abstracts chosen for inclusion?

 At ICFP 2018, there were 700+ oral presentations presented, submitted as both individual and performed abstracts. Each abstract is counted as one oral presentation. All abstracts were reviewed for the novelty of their findings and 64 abstracts were selected for the final paper. We clarified this in the Introduction and Abstract.

How did the process of thematic grouping of the 15 tracks into 6 themes take place?

• The thematic groupings were based on key findings from the selected abstracts and major

thematic areas highlighted in these findings. The 15 tracks were from the abstract submissions and guided the review process, but for the purposes of this paper, new thematic areas were defined based on the main findings from the abstracts.

Include a line in the abstract around the methods.

• The abstract has been revised and this comment has been addressed.

General Comments:

Quite technical language is used from time to time, which may be inaccessible to those outside of the FP space. e.g. Community Based Health Insurance & Couple Years of Protection: these terms could be better explained in the text or in a footnote.

• Thank you for your comment. We have addressed this by explaining CYP and CBHI directly in the text of the paper.

There are too many acronyms, many of which are only used once, therefore could likely be removed to make the paper easier to read.

• We agree with this comment and have removed all acronyms that only occur once in the paper. We have kept acronyms that are used more than once.

Some light copy-editing is needed for grammatical errors.

• We have made editorial copy editing to remove grammatical errors.

Competing Interests: No competing interest declared

Reviewer Report 21 July 2020

https://doi.org/10.21956/gatesopenres.14317.r29113

© **2020 Tran N.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Nguyen Toan Tran

¹ The Australian Centre for Public and Population Health Research, Faculty of Health, University of Technology Sydney, Sydney, NSW, Australia

² Faculty of Medicine, University of Geneva, Geneva, Switzerland

Thank you for the opportunity to review this open letter, which offers a remarkably useful summary of the state of family planning programs and research. A few points:

- With regard to the abstract, a line on the open letter objective and methods would help transition between the introduction paragraph and the second one.
- It would be helpful to learn more about why the theme of "Investing for a lifetime of returns" was chosen, taking into account the tensions between the macro level (e.g.

economic and environmental) and individual level (e.g. empowerment, rights, and justice, which are just touched upon).

- The second para under "Investing in family planning" feels incomplete without acknowledging that access to quality education and employment opportunities is critical to realize the benefits of the demographic dividend.
- Consider stressing how the conference has embraced and contributed to highlighting the development and humanitarian nexus as well as safe abortion!

Minor points:

- The frequent use of abbreviations might impede the text flow.
- Slight text editing required (grammar).
- Check references: 2 and 4: UN DESA vs "DESA/Desa, UN". 2: more recent source available? Duplicates 44 & 45?

Is the rationale for the Open Letter provided in sufficient detail?

Yes

Does the article adequately reference differing views and opinions?

Partly

Are all factual statements correct, and are statements and arguments made adequately supported by citations?

Partly

Is the Open Letter written in accessible language?

Partly

Where applicable, are recommendations and next steps explained clearly for others to follow?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Global health with a focus on sexual and reproductive health and rights, including contraception and postpartum family planning, in development and humanitarian settings

I confirm that I have read this submission and believe that I have an appropriate level of expertise to confirm that it is of an acceptable scientific standard.

Author Response 22 Oct 2020

Jean Christophe Rusatira, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Dear Nguyen,

Thank you for your thorough review of our paper. Please find below our responses to your comments in *italic* and marked with bullets.

Sincerely,

Jean Christophe Rusatira

With regard to the abstract, a line on the open letter objective and methods would help transition between the introduction paragraph and the second one.

• The abstract has been revised and multiple section breaks have been added to make reading the abstract easier.

It would be helpful to learn more about why the theme of "Investing for a lifetime of returns" was chosen, taking into account the tensions between the macro level (e.g. economic and environmental) and individual level (e.g. empowerment, rights, and justice, which are just touched upon).

 We have made changes in the paper to address this comment: this theme was chosen because of the essential role of FP to achieving the 17 Sustainable Development Goals and spoke to the various returns that investments in FP provide — from reproductive health outcomes, to maternal and child health improvements, to empowerment, increases in education, and population-level socioeconomic growth.

The second para under "Investing in family planning" feels incomplete without acknowledging that access to quality education and employment opportunities is critical to realize the benefits of the demographic dividend.

• This was addressed in the new iteration of the paper.

Consider stressing how the conference has embraced and contributed to highlighting the development and humanitarian nexus - as well as safe abortion!

• This was addressed in the new iteration of the paper.

Minor points:

The frequent use of abbreviations might impede the text flow.

• We have removed all acronyms that only occur once in the paper. We have kept acronyms that are used more than one time.

Slight text editing required (grammar).

• Editorial copy editing was provided to remove grammatical errors and improve the flow of the paper.

Check references: 2 and 4: UN DESA vs "DESA/Desa, UN". 2: more recent source available? Duplicates 44 & 45?

• This has been addressed in the new iteration of the paper.

Competing Interests: No competing interest declared

Reviewer Report 20 May 2020

https://doi.org/10.21956/gatesopenres.14317.r28799

© **2020 Biddlecom A.** This is an open access peer review report distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.



Ann Biddlecom 问

Guttmacher Institute, New York City, NY, USA

This open letter concisely summarizes the wide range of scientific inputs to the 2018 International Conference on Family Planning. It serves as a snapshot of the state of current evidence and interest on family planning. What follows are a few suggestions for revision and minor corrections.

- It would be useful to take a further step back from the analysis of content to raise the larger debates on framing family planning that can often be in conflict among stakeholders with different objectives and agendas for action (government, donor, advocates): e.g., Demographic Dividend framing with fertility reduction a focus and macro-level benefits emphasized versus a human rights-oriented framing, where individual well-being and attention to inequities and reproductive justice are a central focus. On page 8 this situation is raised but not discussed ("FP is not only a social justice issue, but a smart investment for individuals and communities.")
- 2. On a related note, could the authors speak to what motivated the thematic framing of the 2018 conference to be "Investing for a Lifetime of Returns"?
- 3. At least a nod to job growth and productivity-related policy supports is needed around the demographic dividend explanation ("The demographic transition leads to numerous, subsequent population-level and societal benefits..."). The fertility reductions and age structure shifts are necessary but not sufficient. Education and health investments are required as well as the ability of the economy to productively employ workers.
- 4. Abstract: State the evidence and method in one sentence on which the theme-based key points are based (i.e., content analysis of conference abstracts). Also, the general phrase "locally owned models provide alternative financing solutions" is not clear for a general reader, perhaps add an example (such as....)
- 5. The abstract has a heavy focus on research alone ("ICFP 2018 highlighted research advances, implementation science wins, and critical knowledge gaps in global FP access and use.") and yet a substantial part of the program was devoted to utilization (advocacy, policy and program shifts).
- 6. (page 6) Clarify if the contrast group is individual decision-making? ("...have been found to be significantly associated with couple's FP decision-making^{60,61}")
- 7. Explicit attention by the authors (and the conference) to safe abortion is merited as it is a

topic and essential intervention often ignored or sidelined in the scientific literature. A helpful contribution of the conference.

Minor comments:

- 1. Where possible, minimize the use of acronyms for readability (e.g., AGYW).
- 2. Reference 2 is not correct. The statement is about the number of couples in 2030 with unmet need for modern methods (and the 2020 revision is available now for all women, not just married women --https://www.un.org/en/development/desa/population/theme/familyplanning/cp_model.asp), but the reference is a much older publication on population estimates (DESA, UN. United Nations Department of Economic and Social Affairs/Population Division: World Population Prospects: The 2008 Revision. 2009b.)
- 3. (page 6) Given the restricted space of an open letter and the number of studies covered, suggest not highlighting the same local study twice (Easterlina and colleagues).
- 4. Reference 4 is an official UN publication the SDGs and not from the Dept of Social and Economics Affairs (DESA).
- 5. References 44 and 45 are duplicates.
- 6. Light copy-editing needed (e.g., in abstract "Promising evidence show that...", "couple discordance...directly influence..."; elsewhere "95% of women living with a mental...faces...).

Is the rationale for the Open Letter provided in sufficient detail?

Yes

Does the article adequately reference differing views and opinions? Partly

Are all factual statements correct, and are statements and arguments made adequately supported by citations?

Partly

Is the Open Letter written in accessible language?

Yes

Where applicable, are recommendations and next steps explained clearly for others to follow?

Yes

Competing Interests: No competing interests were disclosed.

Reviewer Expertise: Demographic research focused on contraceptive use, abortion, reproductive decisionmaking and adolescent sexual and reproductive health.

I confirm that I have read this submission and believe that I have an appropriate level of

expertise to confirm that it is of an acceptable scientific standard.

Author Response 22 Oct 2020

Jean Christophe Rusatira, Johns Hopkins Bloomberg School of Public Health, Baltimore, USA

Dear Ann,

Thank you for your thorough review of our paper. Please find below our responses to your comments in *italic* marked with bullets.

Sincerely,

Jean Christophe Rusatira

It would be useful to take a further step back from the analysis of content to raise the larger debates on framing family planning that can often be in conflict among stakeholders with different objectives and agendas for action (government, donor, advocates): e.g., Demographic Dividend framing with fertility reduction a focus and macro-level benefits emphasized versus a human rights-oriented framing, where individual well-being and attention to inequities and reproductive justice are a central focus. On page 8 this situation is raised but not discussed ("FP is not only a social justice issue, but a smart investment for individuals and communities.")

• This was addressed in the new version of the paper.

On a related note, could the authors speak to what motivated the thematic framing of the 2018 conference to be "Investing for a Lifetime of Returns"?

 Thank you for this comment. We have made changes in the paper to address this comment: this theme was chosen because of the essential role of FP to achieving the 17 Sustainable Development Goals and spoke to the various returns that investments in FP provide — from reproductive health outcomes to maternal and child health improvements, to empowerment, increases in education, and population-level socioeconomic growth.

At least a nod to job growth and productivity-related policy supports is needed around the demographic dividend explanation ("The demographic transition leads to numerous, subsequent population-level and societal benefits..."). The fertility reductions and age structure shifts are necessary but not sufficient. Education and health investments are required as well as the ability of the economy to productively employ workers.

• We have revised this section and incorporated information on the investments and political environment necessary to harness the DD.

Abstract: State the evidence and method in one sentence on which the theme-based key points are based (i.e., content analysis of conference abstracts). Also, the general phrase "locally owned models provide alternative financing solutions" is not clear for a general reader, perhaps add an example (such as...)

• We have provided more details to clarify in the Abstract the process of selecting the final themes for the paper.

The abstract has a heavy focus on research alone ("ICFP 2018 highlighted research advances, implementation science wins, and critical knowledge gaps in global FP access and

use.") and yet a substantial part of the program was devoted to utilization (advocacy, policy and program shifts).

• The abstract has been revised considerably and we have attempted to address this comment.

(page 6) Clarify if the contrast group is individual decision-making? ("...have been found to be significantly associated with couple's FP decision-making 60,61")

We checked this abstract and changed the wording to provide clarifications.

Where possible, minimize the use of acronyms for readability (e.g., AGYW).

• We have removed all acronyms that only occur once in the paper. We have kept acronyms that are used more than one time.

Reference 2 is not correct. The statement is about the number of couples in 2030 with unmet need for modern methods (and the 2020 revision is available now for all women, not just married women --https://www.un.org/en/development/desa/population/theme/familyplanning/cp_model.asp), but the reference is a much older publication on population estimates (DESA, UN. United Nations Department of Economic and Social Affairs/Population Division: World Population Prospects: The 2008 Revision. 2009b.)

 This has been addressed in the new iteration of the paper. Correct citation: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Family Planning 2017 - Highlights (ST/ESA/SER.A/414).

(page 6) Given the restricted space of an open letter and the number of studies covered, suggest not highlighting the same local study twice (Easterlina and colleagues).

 The Easterlina et al. paper was used to augment data on male partners' lack of education and misinformation related to FP. We have kept the citation but revised the Male Involvement in FP Programming section and provided copyediting to make the section more succinct.

Reference 4 is an official UN publication - the SDGs - and not from the Dept of Social and Economics Affairs (DESA).

 This has been addressed in the new iteration of the paper. Correct citation 4. UN (United Nations). 2015. Transforming our world: The 2030 Agenda for Sustainable Development. https://sustainabledevelopment.un.org/post2015/transformingourworld. Accessed 19 August 2020.

References 44 and 45 are duplicates.

• This has been addressed in the new iteration of the paper.

Light copy-editing needed (e.g., in abstract "Promising evidence show that...", "couple discordance...directly influence..."; elsewhere "95% of women living with a mental...faces...).

• Editorial copy editing was provided to remove grammatical errors and improve the flow of the paper.

Competing Interests: No competing interest