Access to family planning for youth: perspectives of young family planning leaders from 40 countries [version 1; peer review: 2 approved with reservations]

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Abstract

Background: With growing populations of young people, low and middle-income countries have renewed focus on reaching both unmarried and married youth with family planning (FP) services. Young people themselves bring an important perspective to guide future programmatic directions.

Methods: In October 2018, 207 youth leaders in FP from around the world completed an online survey prior to their participation at the International Conference on Family Planning (ICFP). These youth leaders provided their perspectives on the most important influencers for youth FP use, how easy or hard it is for youth to obtain FP, preferred sources of FP methods for youth, and perceptions of commonly used terms in FP programming. We examined differences in perceptions of unmarried and married youth’s access to and use of FP using bivariate analyses.

Results: Respondents reported that peers/friends were the most important influencer on use of FP among unmarried youth (80.2%), while spouse/partner was the most important for married youth (80.4%). Oral contraceptive pills, injectable contraception, and contraceptive implants were perceived as significantly harder for unmarried youth to access. Privacy, confidentiality, and anonymity were all important factors for the locations to access FP for unmarried youth, while married youth were more influenced by cost. None of the commonly used terms for FP were perceived positively by a majority of respondents, with the exception of ‘birth spacing’ by African respondents (51.0%).

Conclusions: These findings indicate that the preferences and needs of unmarried youth are different than married youth, but that all young people face barriers accessing FP. Unmarried youth seeking family planning are
more influenced by peers and friends and continue to face difficulty accessing methods compared to married youth. These findings indicate the importance of including youth perspectives in development of youth-focused family planning programs.

**Keywords**
youth, adolescents, family planning, contraception, Africa, Asia

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Introduction
Across Africa, Asia, Latin America and the Caribbean, children under age 15 and youth aged 15–24 comprised 40–60% of the total population in 2017. Many countries will see continued growth of their youth population throughout the next few decades. Adolescent pregnancy is a pressing global health challenge in these regions. The risks of maternal and infant morbidity and mortality are high for young mothers, and young women also suffer disproportionate consequences of unsafe abortion. Unintended pregnancies among young people may lead to them dropping out of school, reduce future employment opportunities, and increase the risk of poverty. Access to sexual and reproductive health (SRH) services for youth is critical for their health and well-being and the overall successful achievement of goals laid out in the United Nations 2030 Agenda for Sustainable Development.

Many countries are actively developing strategies to expand family planning (FP) access for young people, as demonstrated by the fact that nearly all Family Planning 2020 (FP2020) commitment-making countries have a focus on adolescents and youth, including through provision of youth-friendly services, free contraceptives for adolescents, and ensuring consistent commodity supplies to youth-specific facilities. However, the level of detail of these commitments varies significantly. ‘Revitalized’ commitments in 2017 made by Ethiopia, Malawi, and Mozambique included plans to end child and early marriage, expand youth-friendly and school-based services, broaden method-mix availability, and include specific modern contraceptive use targets for unmarried sexually active adolescents.

With the growing number of young people, there is a renewed interest in determining which FP program strategies are most effective with this population. Prior reviews have demonstrated that there is no magic bullet for reaching young people with FP information and services. Programs utilizing demand generation, engaging parents and community leaders, and training health care providers have been effective, but multi-component programming is needed. In addition, more evidence is needed on other approaches designed to reach young people, including providing services outside of health facilities, such as pharmacies and drug shops, determining how to reach the most vulnerable adolescent groups, and developing standardized definitions and indicators of what constitutes ‘youth-friendly’ services to strengthen implementation of this evidence-based strategy. The global community has undertaken FP programming with young people since the 1990s through large initiatives such as FOCUS on Young Adults (1995–2001), YouthNet (2001–2006), PRACHAR (2001–2013), and, most recently, Adolescents 360 (A360) (2016-present). However, there are still outstanding questions regarding the most effective ways to reach young people where and when they most need SRH and FP information and services.

In March 2018, the Full Access, Full Choice project, in collaboration with Family Planning 2020 (FP2020), the Reproductive Health Unit of the World Health Organization, and the Evidence to Action (E2A) project, convened a technical workshop of international organizations, United Nations agencies, and donors to identify key evidence and measurement needs to increase choice of and access to the full range of family planning methods and services for young people globally. The main output of the workshop was a global learning agenda of 41 questions. Participants ranked and identified the top two questions to be addressed in the short, medium, or long term (Figure 1).

An important step in addressing many of these learning agenda questions is gathering young people’s voices and inputs on their lived experiences to inform strengthened programs and policies.
that better meet their needs. With that in mind, this paper describes the results of a survey of youth FP leaders on a selection of the learning agenda questions to guide future FP priorities and programming for young people.

Methods

Survey instrument

A survey was developed by the Full Access, Full Choice project team at the University of North Carolina at Chapel Hill in collaboration with partners at Jhpiego, FP2020, and the International Youth Alliance for Family Planning (IYAFP). The survey questions were developed to align with a selection of the learning agenda questions from the collaborative technical workshop described above regarding influencers on youth FP use, how easy or hard it is for youth to obtain specific FP methods, where they most prefer to get each method, and why they prefer that source for the method. These questions were about attitudes and behaviors of unmarried and married youth in the respondents’ communities rather than questions about their own personal attitudes and behaviors. Respondents were also asked about their perception of commonly used FP terms, if they had suggestions for additional phrases that would be relevant to their community, and to provide, in their own words, suggestions for youth FP priorities in their communities. The survey included both closed and open-ended response options, depending on the question.

The survey was pilot tested with Masters students in a Master of Public Health (MPH) track at the University of Ibadan in Nigeria. The draft survey was shared with interested students by email to understand their comprehension of the questions, the length of time it took to complete the survey, two or three positive and negative elements of completing surveys in the past, and gather any other feedback. This confidential feedback was returned to their class representative and sent to the sixth author (AO), who then shared with all members of the study team to discuss. Selected questions were re-phrased based on this feedback and instructions added to some sections to improve clarity. Following the revisions from pilot testing, the finalized 45-question survey was programmed into the online survey platform Qualtrics. The survey was developed in English and French, the two main languages of target participants. A copy of the survey is included as Extended data 19.

Target population and distribution of survey

The 2018 International Conference on Family Planning (ICFP) in Kigali, Rwanda was unique in that there was a multi-day pre-conference specifically for youth FP leaders, the target audience for the survey. In October 2018, six weeks before ICFP, the link to the online survey was sent by youth conference organizers via email to 425 youth leaders in FP who planned to participate in the youth pre-conference. The survey was sent by IYAFP affiliates on behalf of the study team (contact information was not shared with the study team). The youth leaders included young people identified by a video competition, young researchers whose research had been accepted for oral presentation at ICFP, and youth leaders funded to attend the conference by family planning organizations. The first survey question screened for eligibility and asked if respondents were between the ages of 18–35 years. If a respondent answered ‘no’, they were asked to confirm if they were below age 18 or above age 35. If their age fell outside of the eligible range, the survey ended. The survey was open for an approximate two-week period and one reminder email was sent out after the first week. The initial results were used to guide the development of a breakout discussion session at the youth pre-conference on adolescent and youth data use.

Analysis

We first described the demographics of all eligible respondents who completed all questions in the survey, including their age, sex, geographic region of residence, urban/rural residence, marital status, and whether they were a student at the time of the survey, employed, or involved with activities related to family planning. Geographic region of residence was coded based on respondents’ report of their current country of residence.

For the remaining analyses, we limited the sample to those respondents currently living in Africa, Asia, or Central/South America/Caribbean, as the sample from Europe and North America was comparatively small (n=15) and the research questions were focused on youth in low and middle-income countries. We then examined the main influencers of FP use and compared the frequency by which each influencer group was mentioned between married and unmarried youth using paired t-tests. We then compared respondents’ perspectives on how easy or hard it is for youth to get specific methods and the main factors that affect where they get a method by marital status using chi-square tests. We also described respondents’ reactions to specific FP terminology by region using chi-square tests. All statistical analyses were conducted in Stata (v15.1, College Station, TX).

We identified reasons that unmarried and married youth most prefer particular sources for specific family planning methods through a thematic coding of open-ended responses conducted by the first and third authors (AFC and AMJ). After inter-coder reliability was established, the themes were summarized by whether the question referred to married or unmarried youth and by each FP method and demonstrative quotes were selected. Suggestions for other possible terms for family planning were also grouped thematically by the first and third authors and suggestions selected to represent unique suggestions, as well as geographic diversity. Finally, the second and eighth authors (JO and ISS) conducted a thematic analysis of the responses to an open-ended question asking respondents to describe in their own words what areas still need prioritization to increase youth access to FP. The themes were reviewed and summarized by the first author (AFC). Finally, when the data were prepared for open availability, respondents’ job titles were removed from the dataset to ensure their confidentiality.

Ethical statement

The survey, consent statement, and protocol for data collection were submitted for review to the Institutional Review Board (IRB) at the University of North Carolina at Chapel Hill. The study was deemed exempt from IRB approval given that
responses were anonymous and did not ask personal questions about the behaviors of the participants. Therefore, formal informed consent was not required. However, respondents were still informed at the beginning of the survey that their responses would be kept confidential and no names or identifying information linking them to the survey would be disclosed. In addition, they were told that it was their choice to complete the survey, their participation would not impact their participation in ICFP, and they were free to stop taking the survey at any time.

Results
A total of 207 young people responded to and completed all the survey questions (49% response rate). Over half of all respondents were aged 18–25 years (59.8%), with the remaining respondents aged 26–35 years. Approximately 60% of respondents identified as female (Table 1). Almost three-quarters of respondents (72.4%) identified their current place of residence as a country in Africa, followed by 17.2% living in Asia and smaller proportions from other parts of the world (greater participation of African respondents is likely reflective of the fact that ICFP took place in Rwanda). Forty unique countries were represented. Three-quarters of participants were engaged in family planning related activities as part of their work or school.

Table 2 presents the main influencers that respondents reported that affect the use of FP among unmarried or married youth. The main influencers for unmarried youth were peers and friends (80.2%) and boyfriend/girlfriend (65.2%), followed by media personalities/influencers (29.0%), community health workers (23.7%), and service providers (22.7%). Reported influencers of married youth FP use were significantly different. Spouse or partner was reported as the most influential (80.4%), followed by service providers (44.1%), community health workers (39.2%), and peers/friends (36.3%). A similar question was asked about influencers of contraceptive choice and contraceptive continuation and the pattern of responses was similar (see Underlying data).

Almost two-thirds of respondents said that it was very or somewhat hard for unmarried youth to access most FP methods (pills, injectables, and implants) besides condoms (Figure 2). Conversely, 85.7% and 78.6% of respondents said it was very or somewhat easy for married youth to get pills and injectables (significantly different than unmarried youth).

Table 1. Demographic characteristics of respondents.

| Characteristic                              | Percentage of respondents (N=207) |
|--------------------------------------------|-----------------------------------|
| Age (years)                                |                                   |
| 18–19                                      | 1.9                               |
| 20–22                                      | 18.8                              |
| 23–25                                      | 39.1                              |
| 26–35                                      | 40.1                              |
| Sex†                                       |                                   |
| Female                                     | 59.8                              |
| Male                                        | 39.7                              |
| Other (Gender non-conforming)              | 0.5                               |
| Region of Residence‡                       |                                   |
| Africa                                     | 72.4                              |
| Asia                                       | 17.2                              |
| Central/South America/Caribbean            | 3.0                               |
| Europe/North America                       | 7.4                               |
| Residence‡                                 |                                   |
| Urban (capital or other city)              | 66.0                              |
| Rural (town, village, or other rural area) | 34.0                              |
| Married or in union§                       | 23.9                              |
| Current student§                           | 47.8                              |
| Employed§                                  | 67.8                              |
| Engaged in activities related to family planning§ | 76.7                          |

* N=204; † N=203; ‡ N=205; § N=206
Further, while 70.2% reported that it was easy for married youth to get implants, 19.7% reported that implants are still somewhat or very hard for this group to get. Condoms were rated easy to get almost equally for unmarried and married youth.

Respondents also provided information about where unmarried and married youth most prefer to obtain different FP methods (Figure 3). The preferred locations varied by method and marital status. According to respondents, unmarried youth most prefer to get pills from pharmacies and chemists (62.3%), while married youth most prefer to get their pills from a hospital or health clinic (58.1%). Both married (84.8%) and unmarried (60.7%) youth prefer hospitals or clinics to get injectables, though nearly one fifth of respondents said that unmarried youth would like to get injectables at a pharmacy/chemist. Shops were the most commonly preferred source for condoms for both unmarried and married youth, followed by a pharmacy/chemist for both groups. Other sources for condoms suggested by small numbers of respondents included vending machines/dispensers, youth clinics, peer educators, school/university, or at community events. Finally, respondents reported that both married (89.0%) and unmarried (80.7%) youth would most prefer to get implants at the hospital or health clinic (see Underlying data)\(^9\).

Respondents were asked what factors have the most impact on where youth seek FP, as well as open ended questions about why they thought unmarried or married youth most preferred specific sources by method. Some different reasons emerged across methods and locations for married and unmarried youth. For example, in open ended responses, respondents reiterated that unmarried youth prefer to get pills at pharmacies/chemists due to privacy, confidentiality, and less judgement than they might expect to experience at a health facility, whereas married youth prefer to get pills at a hospital or clinic where they are free (Table 3). Other reasons for preferring a particular source for a specific method included in Table 3 demonstrate the importance of access to and safety of injectables from ‘trained’ providers, as well as the perceived advantage of shops and pharmacies/chemists because they are discrete and there is more anonymity and less judgement passed during the business transaction of purchasing condoms.

Respondents were then asked about how youth perceive commonly used terms in FP programming (Table 4). The terms

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**Table 2. Main influencers of family planning use for unmarried and married youth\(^a\).**

| Influencers                                         | Unmarried (\(%, \text{N}=207\)) | Married (\(%, \text{N}=204\)) |
|-----------------------------------------------------|----------------------------------|-------------------------------|
| Peers/friends                                       | 80.2                             | 36.3                          |
| Boyfriend/girlfriend (unmarried)                    | 65.2                             | 80.4                          |
| Spouse/partner (married)                            | 65.2                             | 80.4                          |
| Service providers                                   | 22.7                             | 44.1                          |
| Community health workers                            | 23.7                             | 39.2                          |
| Media personalities/influencers                     | 29.0                             | 14.7                          |
| Parents                                             | 15.0                             | 23.0                          |
| Neighbors or others in community                    | 8.7                              | 16.7                          |
| Aunts, uncles, other family                         | 4.8                              | 14.7                          |
| Religious leaders                                  | 5.8                              | 6.9                           |
| Siblings                                            | 5.3                              | 2.5                           |
| Teachers                                            | 8.7                              | 1.0                           |
| Internet, social media, media\(^a\)                 | 2.4                              | 0.5                           |
| Non-governmental organizations/community-based      | 1.0                              | 0.5                           |
| Government leaders                                  | 0.0                              | 1.0                           |

\(^a\)Respondents could provide up to three responses; \(^*p<0.05, \quad **p<0.01, \quad ***p<0.001\) comparing the percentage that gave each response for married versus unmarried youth.
Table 3. Commonly reported reasons for most preferred sources of family planning for unmarried and married youth by method.

| Method   | Marital status | Location                      | Reasons                          | Sample quote                                                                 |
|----------|----------------|--------------------------------|----------------------------------|------------------------------------------------------------------------------|
| Pills    | Unmarried      | Pharmacy/chemist               | Privacy, confidentiality         | “People can’t judge them easily, they may think that he/she went to bought [sic] other type of medicine” |
|          | Married        | Hospital/clinic                | No judgement, business transaction | “It is more of business such that no one can bring up moral issues”          |
| Injectables | Both unmarried and married | Hospital/clinic | Safety, trained providers        | “Because they see [an] injection as something complex so they would rather prefer getting it from a professional” |
|          |                |                                | Access, availability             | “The family planning clinics are [the] only places we can access injectables” |
| Condoms  | Both unmarried and married | Shops; pharmacy/chemist | Easy access, convenience         | “It’s easy to buy from chemists, no prescription needed”                     |
|          |                |                                | Discrete, anonymous              | “They find this more discrete because when leaving a pharmacy, no one will know why you went there” (translated from French) |
|          |                |                                | No judgement, business transaction | “You just walk up with money and you are given the product without questions or caution” |
|          |                |                                |                                  | “Chemist attendants do not query or lecture the unmarried people. It is just business” |
|          |                |                                |                                  | “Because at the shops they are not judged that they are using condoms as a couple since the society does not understand that married couples can use condoms” |

“birth spacing” (51.0%) and “contraception” (44.7%) were perceived most positively by African respondents. “Long acting and reversible contraception (LARC)” was received less positively, whereby 36% of African respondents reported that youth do not understand the term and 32% reported that the term was viewed negatively. Almost two-thirds of Asian respondents reported that youth do not understand the term in their region. Respondents were asked to make suggestions for other possible terms for FP that might resonate with youth. A few selected responses in Table 5 demonstrate a desire for a more holistic discussion of the role of FP in the lives of youth.

Finally, respondents were asked what areas need more prioritization to increase youth access to FP in their own words. The key themes focused on education, reducing stigma, and engaging youth. Respondents suggested that sex education should be made available throughout the school setting from high school through college. Others suggested that it was key for policy makers, programs, and providers to reach youth ‘where they are’, including making information and methods available online, through social media platforms and apps, and at places where youth gather, like clubs and colleges/universities. Respondents also believed that stigma and myths related to FP still
need to be addressed, through education of community and religious leaders and support for parents to have open conversations about sex and FP with their children. Others suggested reframing FP as more holistic ‘life planning’.

Respondents said that stigma can be reduced by ensuring that FP is integrated into the national health care program, by removing requirements for minors to get parental permission to access FP, and by removing bans on advertising for condoms or FP on television or radio. Young people indicated that youth should be engaged at all levels of planning in order to make programs and policies that are more responsive to their needs. Other suggestions included identifying ‘younger’ providers to serve youth and increasing hours of FP clinics to make them more convenient for students. Finally, respondents suggested prioritizing high quality and reliable data collection on the perceptions and experiences of young people related to these issues and building the capacity of local organizations to ensure sustainable advocacy.

Discussion
This survey of young FP leaders gives insight into several factors influencing youth FP use. A key point was the extent to which respondents noted that FP use for unmarried youth is differentially influenced by those they are interacting with the most: their peers and friends and boyfriends/girlfriends, but also

Table 4. Whether youth perceive commonly used FP terms as positive, negative, or neutral†.

| Term                                      | Positive | Negative | Neutral | Youth do not understand this term |
|-------------------------------------------|----------|----------|---------|----------------------------------|
| Family planning                           |          |          |         |                                  |
| Africa                                    | 37.9%    | 22.8%    | 24.8%   | 14.5%                            |
| Asia                                      | 38.2%    | 5.9%     | 35.3%   | 20.6%                            |
| Contraception                             |          |          |         |                                  |
| Africa                                    | 44.7%    | 14.9%    | 28.4%   | 12.0%                            |
| Asia                                      | 36.4%    | 21.2%    | 27.3%   | 15.1%                            |
| Long acting reversible contraception (LARC) |          |          |         |                                  |
| Africa                                    | 11.2%    | 31.5%    | 21.7%   | 35.6%                            |
| Asia                                      | 8.8%     | 17.6%    | 5.9%    | 67.7%                            |
| Birth spacing*                            |          |          |         |                                  |
| Africa                                    | 51.0%    | 12.6%    | 21.7%   | 14.7%                            |
| Asia                                      | 26.5%    | 0.0%     | 41.2%   | 32.3%                            |

† Central/South American/Caribbean (n=6) and Europe/North America (n=15) respondents not included due to small number of respondents

*p<0.05

Table 5. Suggestions for other possible terms for family planning.

| Suggestion                                                                 | Respondent country |
|---------------------------------------------------------------------------|--------------------|
| *‘nyansapo: i.e. involving total discussions on matters of growth and maturation in all areas of life that enables one to disentangle complexities of life with wisdom, skill, dexterity and profound capacities to adapt to the exigencies of life including planning the life of family in relation to one’s aspirations of ‘family’ that has the wherewithal to make choices freely and with support availability where needed” | Ghana              |
| “Goal Keeper-When you use FP it’s like you keep babies from coming out.”  | Malawi             |
| “future protection- this term is normally used by adolescent to mean protecting future by contraception” | Kenya              |
| “Future Plan”                                                             | Kenya              |
| “Life planning”                                                           | Nigeria            |
| "Éviter les grossesses non désirés” (Avoiding unwanted pregnancies)       | DRC                |
| “For many people family planning implies that you already have a family, and it excludes unmarried people” | Guatemala          |
media personalities or influencers and internet and social media. As access to internet-enabled mobile phones continues to grow, efforts to reach youth with health messages have begun to shift to mobile phones and social media, with the goal, as respondents noted, of meeting them "where they are". The challenge that remains is determining the best way to reach specific groups of youth, as access to mobile phones may be disproportionate across countries in urban vs. rural settings and by socioeconomic status. While many FP mobile health (mHealth) interventions to date have focused on tools to help providers with counseling, products such as Nivi, a digital marketplace for information, recommendations, and referrals for FP, could offer key opportunities to target unmarried youth with accurate information, answers to questions, and linkages to care.

Stigma related to unmarried youth’s access to FP continues to persist and is likely reflected by most respondents reporting that it is very or somewhat hard for unmarried youth to access pills, injectables, or implants. While expanded youth-friendly services is a stated goal by many countries, these efforts should make sure to prioritize the specific factors that respondents characterized in preferred sources: affordability, privacy/confidentiality/anonymity, discrete staff, no judgement, and staff who make clients feel comfortable. As respondents suggested, there is still work to be done to reduce stigma and provider bias in communities and health facilities. It is important that programs targeting young people do not simply train providers on youth-friendly services, but also include other individuals who interact with young people (e.g. pharmacists, teachers, and religious leaders). This will ensure that young people are surrounded by supportive adults to help facilitate their access to FP services where and when they need it. Another option to meet the desire for privacy/confidentiality and reduced stigma may include increasing access to additional methods at pharmacies/chemists and drug shops, such as subcutaneous Depo Provera (DMPA-SC), which young people could purchase and administer themselves at home or another private location.

Language was also an important focus for feedback in this survey. None of the most commonly used programmatic terms for FP were viewed particularly positively by young people, except for ‘birth spacing’ in Africa. While there may be numerous existing local translations and slang for different contraceptive methods, many of the commonly used phrases do not necessarily resonate with youth. Suggestions for different terminology focused on ‘future’ planning or ‘life’ planning, with the use of ‘family’ possibly alienating unmarried youth. Programmatic efforts may want to focus on developing alternate, context-specific terms for FP, contraception, and LARC that resonate more closely with the lived experiences of young people in their settings. Some programmatic examples to date include the branding associated with Diva Centres in Zambia and Future Fab in Kenya (both collaborative projects of Marie Stopes and IDEO.org).

**Limitations**

This study has some important limitations. Most of the respondents were based in Africa, likely because the ICFP took place in Rwanda and those from outside Africa may have been less able to travel to and attend the meeting. Therefore, responses presented are likely more applicable to African country-contexts than other parts of the world, particularly as the types of FP methods and facilities at which they are available may vary in other contexts. However, stigma toward sexually active unmarried youth using FP exists across many countries, so it is possible that similar conclusions would be reached with a more geographically diverse sample of respondents. In addition, this study focused exclusively on respondents who were engaged with the conference and thus is not generalizable of all young people. However, the respondents in this survey are likely to have participated in programmatic efforts directed at youth in their own countries and thus can speak from lived experience about their peers.

**Conclusions**

This paper provides direct feedback from youth engaged in FP issues within their communities. Their perspectives are particularly useful as governments, policy makers and program planners seek to increase equitable access to FP for youth in their countries and operationalize their FP2020 commitments related to adolescents and youth. As reflected here, to truly reach young people, ‘youth-friendly’ services must continue to focus on meeting youth where they are, reducing stigma in communities and bias among providers, using language and programs that integrate FP into larger issues of achieving healthy lives and futures, and finally, continuously engaging a youth perspective on the success of these efforts.

**Data availability**

**Underlying data**
Harvard Dataverse: Access to Family Planning for Youth: Perspectives of Young Family Planning Leaders from 40 Countries. [https://doi.org/10.7910/DVN/M1OHT](https://doi.org/10.7910/DVN/M1OHT)

This project contains the following underlying data:
- ICFP Youth Survey Data 2019 06 21.tab (Raw data from all survey respondents and additional variables created for analysis)

**Extended data**
Harvard Dataverse: Access to Family Planning for Youth: Perspectives of Young Family Planning Leaders from 40 Countries. [https://doi.org/10.7910/DVN/M1OHT](https://doi.org/10.7910/DVN/M1OHT)

This project contains the following extended data:
- Additional data documentation ICFP Youth survey 2019 06 21-1.pdf (Documentation describing additional variables created for data analysis)
- Survey_of_ICFP_Youth_Pre-Conference_Participants 2019 06 21.pdf (Survey of ICFP youth conference participants in English)
- Survey_of_ICFP_Youth_Pre-Conference_Participants_FR 2019 06 21.pdf (Survey of ICFP youth conference participants in French)
Data are available under the terms of the Creative Commons Zero “No rights reserved” data waiver (CC0 1.0 Public domain dedication).

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This is an innovative paper that capitalizes on surveying youth leaders who were planning to attend the 2018 ICFP Conference in Rwanda. I appreciated the efforts to incorporate both qualitative and quantitative data and analysis. The topics they attempt to cover, including perceived barriers to FP by contraceptive type and marital status, are important to consider while making programming and policy decisions.

One issue when reading the manuscript is understanding exactly how the questions were asked. When I first read it, I assumed the respondents were answering for themselves. I had to read it a second time before realizing they were responding on behalf of “youth”. It appears that they were given the instruction to consider adolescents and youth “in the community you currently reside.” That contextualization is critical to determine the relevance of the responses. (Similarly, did older, married respondents have different answers from younger, unmarried respondents?)

The paper needs to stress throughout the methods and results section that these are not individuals' personal responses to their own barriers or influencers, but rather what they think other youth may perceive. You allude to this in the limitations, but may want to further highlight that these responses are "one-step removed."

Another issue in the framing (including the title) is that this is a global survey of youth, when in fact the vast majority were from Africa. I suggest reanalyzing the data in Table 2-3 and Figures 2-3 to see if there are variations by location. Even if you don't include all that information in the tables themselves, you could add a sentence or two to the text stating if variations by location were found.

Two other minor points:

In the introduction, please consider if all the acronyms are necessary. If you only use a term a couple times, you can just keep the complete wording. Also, if you do include an acronym (such as FP2020), you only need to define it once.
Finally, when asking about commonly used FP terms, did you include sexual and reproductive health? Did anyone mention that? You have the term in the first paragraph of the introduction, but it isn't used again. (In my experience, youth understand that much more easily than FP.)

**Is the work clearly and accurately presented and does it cite the current literature?**
Partly

**Is the study design appropriate and is the work technically sound?**
Partly

**Are sufficient details of methods and analysis provided to allow replication by others?**
Yes

**If applicable, is the statistical analysis and its interpretation appropriate?**
Partly

**Are all the source data underlying the results available to ensure full reproducibility?**
Yes

**Are the conclusions drawn adequately supported by the results?**
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Adolescent sexual and reproductive health, program evaluation, implementation science

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, however I have significant reservations, as outlined above.

Author Response 02 Nov 2019

**Alice Cartwright**, Department of Maternal and Child Health, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, USA

Thank you to the reviewer for their comments. We think it is important to make the distinction that those who are not a part of the group about which they are being asked (e.g. asking married people about unmarried youth) may have different impressions. These additional results (where significant) have been added to the Results section.

Thank you to the reviewer for their suggestion to underscore that respondents to the survey were providing their impressions of influencers on and access to FP for youth in their communities (not for themselves). We have added more clarification throughout the Methods and Results sections to underscore that respondents are giving their impression on behalf of youth in general. We have also added additional detail to the Limitations section to clarify that respondents were asked to provide their impressions of youth in their communities, and these impressions are likely not applicable to all youth in their countries, especially considering the variety of race/ethnicity/tribal and religious identities that may exist.
We have added in the text places where significant regional differences in responses were identified.

We have removed acronyms only mentioned once or twice and confirmed that the acronyms used frequently in the paper, including FP2020 and ICFP are only defined once (with an additional explanation in the abstract if necessary).

In this survey, we asked respondents “Do adolescents/youth in your community perceive the following terms positive, negative, or are they neutral about them?” and then listed the terms “family planning”, “contraception”, “long acting and reversible contraception (LARC)”, and “birth spacing”. We then asked respondents “Are there more appropriate words/phrases for these terms that are preferred in your community? If yes, please provides these other terms and their definitions.” It was from these responses that we extracted unique and thematic responses, which are presented in Table 5.

**Competing Interests:** No competing interests were disclosed.
Please explain why you included individuals up to age 35 as this does not fit within the definition of youth or young people.

Did participants receive any incentives to complete the survey?

Please consider expanding further upon Table 5 - are there any existing efforts to integrate these suggestions (like holistic life planning efforts) into youth FP services? As is, this table is somewhat difficult to interpret or understand the implications.

**Is the work clearly and accurately presented and does it cite the current literature?**  
Partly

**Is the study design appropriate and is the work technically sound?**  
Partly

**Are sufficient details of methods and analysis provided to allow replication by others?**  
Yes

**If applicable, is the statistical analysis and its interpretation appropriate?**  
Yes

**Are all the source data underlying the results available to ensure full reproducibility?**  
Yes

**Are the conclusions drawn adequately supported by the results?**  
Yes

**Competing Interests:** No competing interests were disclosed.

**Reviewer Expertise:** Adolescent medicine, contraceptive services for adolescents

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, however I have significant reservations, as outlined above.

Author Response 02 Nov 2019

Alice Cartwright, Department of Maternal and Child Health, Gillings School of Global Public Health, University of North Carolina at Chapel Hill, USA

The reviewer makes an important point that respondents are making generalizations for ‘youth’ in their communities and not making specific distinctions of the needs or preferences of more specific demographic groups. We have more clearly made the distinction in the paper that the questions regarding influences and preferences regarding terminology are phrased to refer to married/unmarried ‘adolescents and youth’, while the questions about access to contraception are phrased differentially regarding married/unmarried ‘people’ for access to pills and condoms or married/unmarried ‘young women’ for injectable contraception and implants.
Unfortunately, respondents were asked for their demographic information at the end of the survey, and therefore we do not have the ability to make conclusions about differences between respondents and non-respondents. We have added a mention of this in the Limitations section, as well as an acknowledgement that statements about ‘youth’ generally may not capture the diversity of experiences among all identities.

While generally accepted definitions, including that of the World Health Organization, are of youth as ages 15-24 years and young people as 10-24 years, some countries’ definitions of youth are not always consistent with these ranges. For example, while the Nigerian Federal Ministry of Health aligns with the WHO definition, the Federal Ministry of Youth does not. At the time of the study, the definition of youth used in the National Youth Policy in Nigeria (2009) was specified as all males and females aged 18 – 35 years who are citizens of the Federal Republic of Nigeria. The invitees to the ICFP Youth Pre-Conference included those up to age 35. We have therefore presented results from the full range of respondents, as those 15-24 only included 46% of total respondents and those in the 25-35 age range can provide interesting insights into their younger peers.

Respondents did not receive any incentives to complete the survey. This detail has been added to the Methods section.

We have added additional text within the Results section to better contextualize the feedback from respondents (i.e. moving away from the emphasis on “family” in family planning). We have also added information on programmatic efforts by Adolescents 360 in Ethiopia, Tanzania, and Nigeria that have supported young women in entrepreneurial and financial skills, with contraceptive use presented as a tool to help them achieve other goals.

**Competing Interests:** No competing interests were disclosed.