Research Title:

Effect of Public-private partnership strategy on Long-Acting Reversible and Permanent (LARP) FP Methods Outcome; Evidence from Women's Integrated Sexual Health 2 Action (WISH2ACTION) project

Principal investigators

Mr HARMSON OPIRA KITEZE
Tel: +256789958533/+265750460824; Email: hopira@rhu.or.ug
Plot 2, Katego Road, Tufnell Drive, Off Kira Road, Kampala, Uganda
Organisation: Reproductive Health Uganda (RHU)

Co-principal investigators

1. Dr Annette Nagudi
   Tel: +256772886500/+265705229915; Email: anagudi@rhu.or.ug
   Plot 2, Katego Road, Tufnell Drive, Off Kira Road, Kampala, Uganda
   Organisation: Reproductive Health Uganda (RHU)

2. Dr Simon Peter Lugoloobi
   Tel: +256700390240/+256782060520; Email: slugoloobi@rhu.or.ug
   Plot 2, Katego Road, Tufnell Drive, Off Kira Road, Kampala, Uganda
   Organisation: Reproductive Health Uganda (RHU)

Version 3: Sunday, October 16, 2020

ACRONYMS

ANOVA	Analysis of Variance
BTL	Tubal Ligation
CBD	Community based distributors
CHW	community health workers
CIP	Costed implementation plan
CYP	Couple Years of Protection
DFID	Department for International Development
DHIS 2	District Health Information System 2
FCDO	The Foreign, Commonwealth and Development Office
FP	Family Planning
HQ	Headquarters
IMA	Information Management Assistant
IMO	Information Management Officer
IPPF	International Planned Parenthood Federation
IUD	Intrauterine Device
LARPC	long-acting reversible and permanent Contraceptives
MA	Members association
MANOVA	Multivariate Analysis of Variance
MCPR	Modern method contraceptive prevalence rate
MoH	Ministry of Health
PPP	Public-Private Partnership
RHU	Reproductive Health Uganda
RHU	Reproductive Health Uganda
SRHR	Sexual and Reproductive Health Rights
WISH2ACTION2ACTION	Women's Integrated Sexual Health 2 Action

Table of Contents

Abstract

Background: The global population growth rate is wreaking havoc on a wide array of health, economic, social and personal decisions. However, what may remain lost with other effects and dangers is the detailed impact on sexual reproductive health and rights, for both people in the world and around Uganda. Moreover, the unmet need for family planning has remained high among married women in the country that contributes to unplanned pregnancies. The WISH2ACTION project uses Public-Private-Partnership working with facilities as a strategy to improved provision of services. We designed this study to evaluate the effectiveness of public-private partnership in the provision of long-acting reversible and permanent family planning methods in WISH2ACTION operation region of Uganda.

Methods: retrospective analysis of data on core Women's Integrated Sexual Health 2 Action Project (WISH2ACTION) indicators; Implants, Intrauterine devices and Permanent Methods and methods provided to youth under 20 years. Data were extracted from RHU DHIS2 and assess for compliance with MANOVA assumptions. The data was further powered to provide an appropriate sample estimation before running the MANOVA model to evaluate the effectiveness of the public-private partnership.

Results: analysed data from 228 associated facilities adequate to accept hypothesis testing based on 177 samples after power estimation. The multivariate analysis of variance (MANOVA) showed significant differences hence we infer that PPP strategy was more effective on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project and significantly different than that of the NPPP strategy. Post hoc analysis indicates that public-private partnerships strategy positively affects the provision of Implant and provision of FP to under 20 by 76% & 68% respectively. The findings also indicate that as the modern contraceptives prevalence rate increase, the sample size for such research keeps on reducing to determine whether the unmet need for family planning reached. However, the strategy did not show any impact on the provision of IUCD and permanent methods.

Conclusions: The study concludes that Public-Private Partnerships associated facilities (PPPF) enabled effective delivery of services to the clients. The existence of a partnership is an opportunity to achieve the goals of reducing limited access to family planning services. Young people have been engaged through dialogue meetings, radio spots, YAM under RHU rallying other young people to demand for SRHR services remains as most vigorous measures. We recommend services Integration in most facilities to improve uptake of IUCD and permanent methods of family palling, which is greatly affected.

1: Introduction

A cooperative arrangement among two or more private and public sector refers to as Public-private-partnership (PPP) has been an increasing preferred model used in many social service deliveries in developing countries. The use of PPP attributed to the fact that the government or private sector alone cannot wholly deliver all services at the required standards (Yanhong L *et al.* 2019). PPP in health service delivery has been implemented in different parts of the world to facilitate quick service provision to all people, but also it has been effective in lowering costs. Several studies have revealed that PPP in health services has been acting as an essential tool in facilitating the provision of affordable and quality services. A study by Musa (2016) on the effects of PPP on health service delivery in Tanzania shows that partnership between Government and private sectors have subsidised to the accessibility of health services to most people as compared before the PPP.

1.1: Background to Analysis

The global population growth rate is wreaking havoc on a wide array of health, economic, social and personal decisions. However, what may remain lost with other effects and dangers is the detailed impact on sexual reproductive health and rights, for both people in the world and around Uganda. The poor and the marginalised women face a more significant impact, Imagine with the fertility rate of Ugandan women currently at 5.01 according to www.worldometers.info/world-population/uganda-population as of 2020. Creating broad links between the population growth responses and sexual and reproductive health and rights to mitigate the impact is significant.

Providing access to effective modern long acting-term (LT) contraception methods is the most cost-effective interventions to reduce maternal mortality through preventing unintended pregnancy habitually because of early child marriage thereby protecting an individuals' physical and mental health (A.O. Tsui et al., 2010). Uganda Family planning ATLAs 2018, estimates that 1,036,000 unintended pregnancies, 228,000 unsafe abortions and 2,500 maternal deaths have been averted due to the use of modern methods of contraception. While these where averted, there are many women, men and youth in Uganda who want to plan their families better currently but struggle or do not always finds the services they need.

The family planning unmet need has remained high 32.6 per cent among married women in the Country (FP2020, 2017-2018). High unmet need also contributes to unplanned pregnancies. Uganda Demographic Health Survey 2016 shows that rural Women reported higher levels of unmet need at 37 per cent compared to their counterparts in urban areas at 23 per cent.

A study by Ahimbisibwe J.A et al., 2018 shows that 32% of the clients visiting public health units do not get all prescribed methods. The majority find their way to private health facilities that encroaches on their low incomes. Improving family planning services for both public and private health facilities would lead to significant improvements in the health of women's and children and economic development. It reduces poor access to quality family planning services characterised by a few skilled providers and scarce commodities that give the client little or no choice of methods of family planning. This significantly increases the ability of men and women to decide childbirths hence directly impact on population growth freely. This analysis is, therefore, to document the effect of PPP strategy used in the provision of Long-Acting and Permanent Methods (LAPM) of family planning methods under Women's Integrated Sexual Health 2 Action Project (WISH2ACTION). The positive impact would indicate how the population are satisfied with the services received from PPP health providers. These study results will support continued and increased used of PPP strategy to expand contraceptive choices, complemented high-quality of services.

1.2: The Policy environment

In 2014, The Ministry of Health launched Uganda's family planning costed implementation plan *(CIP) 2015 /16-2019/2020* to increase uses of modern contraceptives. The plan incorporated governments adopted Public-Private Partnership

policy 2010 to improved public services and public infrastructure based on the principle for better value for money, suitable risk transfer and management and taking advantage of private-sector innovations. It is an initiative geared toward achieving the FP2020 commitment signed by the Government. The commitment is a global partnership that promotes individual rights of girls and women to choose and use the family planning methods that best works for them which is the core of the Government's response to the country's high FP needs. FP2020 mCPR projection for Uganda is 29.5% among all Ugandan women. The Government in 2017 revised its original commitment (of 2012) to reduce unmet needs among married and unmarried from 30.4% in 2016 to 10% in 2021

1.3: The Project
1.3.1: The Women's Integrated Sexual Health Programme
Women's Integrated Sexual Health 2 Action Project (WISH2ACTION) is a three years DFID funded project aiming at transforming the lives of millions of women and girls. The WISH2ACTION is a multi-country program implemented by 11 IPPF Members association (MA) and a consortium of 6 partners. The project seeks to provide integrated and rounded reproductive healthcare to 2.2M additional users of contraception across 16 countries in Africa and South Asia from 2018 to 2021.

The overall goal of the project is to reduce maternal mortality through increased access to voluntary long-acting reversible and permanent contraceptives (LARPC) among vulnerable women and young people; explicitly aiming to target
- Couple Years of Protection (CYP)
- Targeting the poor and marginalised populations (including people with disability, those affected by the humanitarian crisis as well as individuals living in hard-to-reach areas
- Reaching young women and girls particularly youth under 20
- Additional FP users reached by the programme
- Sustainability with at least two sustainability measures achieved

1.3.2: Delivering services under WISH2ACTION
Reproductive Health Uganda (RHU) is a non-governmental organisation that champions and enables universal access to rights-based sexual and reproductive health information and services. Under WISH2ACTION, RHU provides services in 6 sub-regions that include central, Acholi, Lango, Bugisu, Bukedi and Busoga of the Country through 273 service points: 207 Public static clinics and 66 Private associated clinics and network of hundreds of community-based distributors/communities-based services (CBDs). RHU's comprehensive range of services includes family planning, the prevention and treatment of HIV and AIDS, the diagnosis of sexually transmitted infections and post-abortion care. The combination of SDPs in each Country is Country-specific but is broad as follows:
- Static: facility-based services provision of FP methods and integrated SRH services to communities;
- Mobile: outreach services in hard to reach areas providing a broad range of FP methods and integrated SRH services to communities; and
- CBD: Through trained community health workers (CHWs) who provide counselling, a broad range of FP methods and referrals to other services.

1.4: Objectives of the study
The general objective of the study is to explore the effect of public-private partnership in the provision of long-acting reversible and permanent family planning methods in WISH2ACTION operation region of Uganda. The following are the specifics objective of the study;
a) Assess the effect of PPP on the provision of long-acting reversible Family planning Methods
b) Assess the effect of PPP on the provision of permanent Family Planning methods
c) Assess the effect of PPP on long-acting reversible and permanent contraceptives provision among under 20 years

2: Research Methods

2.1: Study design

The analysis was retrospective follow up of the Women's Integrated Sexual Health 2 Action Project structured interview and reported facility-base-services (Static) data collected from December 2018 to June 2020. All clients who come for services are counsel by service provider one on one as well as providing a standardised face to face Family Planning flip charts. The RHU interview questionnaire (Tally sheet) is used to capture Clients' Information when they come for Sexual reproductive and health rights, plus family planning services by providers. Data is then validated at the point of submission to improve quality. On the other hand, the summary report submitted through monthly reporting tools; the selected focal facility person completes this form with data summaries from the MoH reporting book. Data is also checked for under-reporting or any deliberate distortion by IMO before entry.

2.2: Data sources

The January 2019-June 2020 retrospective data was extracted from the District health information system (DHIS2). District health information system (DHIS2) is the central management information system where all RHU project data entered. The selected WISH2ACTION Ministry of Health (MoH) partner facilities and Private associated clinics submit all data about the clients served to Information management officers (IMO) by 30th of every month. The facilities use the Tally sheet and facility reporting tools to record clients' detail relevance to reporting for WISH2ACTION project services. Information management officers then enter these data into DHIS2.

Figure 1: Overview of RHU Data Flows
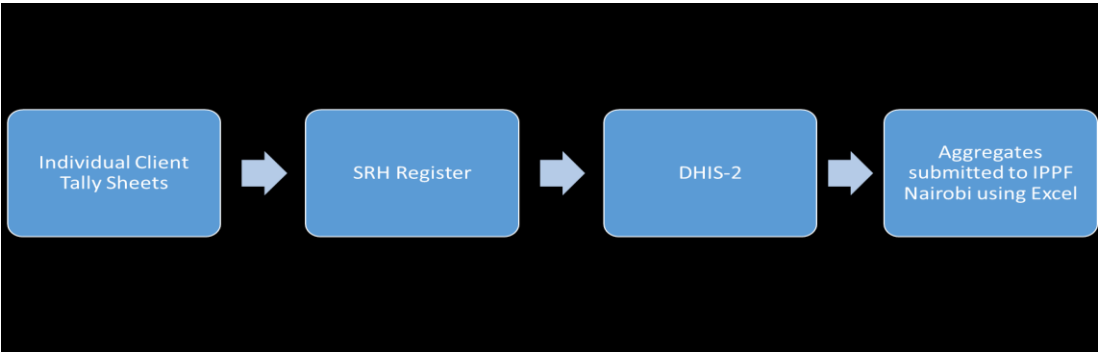
2.3: Measures

2.3.1: Dependent variables

The study uses core project indicators (or measure) of the Women's Integrated Sexual Health 2 Action Project (WISH2ACTION). The core indicators include; Number of FP-Implants (Implanon-3yrs Implants & Jadelle-5yrs Implants), Number of FP-Intrauterine devices (IUDs) and Number of FP-Permanent Methods (Vasectomy & BTL) and Number of FP-methods provided to youth under 20 years. The indicators are central to WISH2ACTION as well as have a significant effect in achieving the goal of scaling up the use of Long-Acting reversible and Permanent contraceptives methods. The analysis focussed on family planning methods generated for the selected above indicators.

2.3.2: Independent variables

The variable considered in analysis was the Public-Private Partnership in long-term family planning service delivery under the Women's Integrated Sexual Health 2 Action Project. This variable of interest was grouped into two categories Public-Private Partnership associated facilities (PPPF) and Non-Public-Private Partnership associated facilities (NPPPF).

2.4: Data processing method

2.4.1: Data cleaning and assumptions Assessment

As the subject implies, the researcher provided data summaries in the graphical representation of means and density to help give the nature descriptive statistic of the variable. The assessment of extracted data follows conditions in which they are obtained and the four assumptions;

- *Outliers assumption Assessment;* In the field of project implementation, there always a situation of having conspicuous figures that are either abnormally low or high which may not follow the pattern of a variable which the researcher may experience. There were no outliers that could have bias the result of this analysis as well as reducing accuracy.
- *Linearity assumption Assessment;* was assessed through Quantile–quantile plots to compare actual data against data that would be expected if they were from the normal distribution. The dependent variables are detected whether they linearly distributed to the normal line using QQ-plot. The nature of such straight-line divergence reveals how the data fail to conform with normality.
- *Normality Distribution Assessment;* of each dependent variable was graph via histogram and normal density plot to confirm whether they sufficiently meet the assumption of approximate normal distribution should be an informed judgment based on a series of diagnostic checks
- *Multicollinearity and Singularity Assuqmption Test;* Researcher produce a Bivariate correlation matrix for all the dependent variables. The correlation matrix method examines whether the factors are highly correlated. Presence of several correlations greater than .80 suggests that multicollinearity might be an issue in the study.
- *Homogeneity of Variance-Covariance Matrix Assumption test;* MANOVA assumes that the variables in the analysis show similar variances and covariances. The researcher takes Tabachick and Fidell (2013) recommendation of Box's M test to detect violations of the assumption of homogeneous variance-covariance matrices, and Laerd Statistics (2015) has recommended using a stringent level of significance ($p < .05$) to evaluate the significance of Homogeneity of Variances and Covariances.

2.4.2: Power and Sample size estimation

While this study utilises extracted data, the researcher considered powering data following Uganda Family planning costed implementation plan (CIP) 2015 /16-2019/2020) to increase uses of modern contraceptives to 50% (0.5) and reduce the unmet need to 10% (0.1) toward achieving the FP2020 commitment signed by the Uganda Government. Employing statistical methods to determine the effect of PPP (i.e. the statistical hypothesis to be tested) based on Government projected plan to reach 68.3% statistical power. These ensure that the null hypothesis is correctly rejected (or accepted) based on the minimum sample size and power of test provided.

2.4.3: Multivariate analysis

Multivariate analysis of variance (MANOVA) was used during analysis to test for the effect of the implementation strategy (PPP or NPPP) effect on each dependent explanatory variable. This method gives a better chance of discovering the effect of the project strategy since it allows the measuring of several project outcome indicators in a single statistic experiment. The model further protected against rejecting the effective project strategy (Type I errors) that might occur if multiple analysis of variance (ANOVA's) are conducted independently.

The mathematical expression of the MANOVA with j[th] (p-dimensional) observation belonging to the ith population modelled according to the following equation:

$$x_{ijr} = \mu_{ir} + t_{jr} + \varepsilon_{ijr} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 3$$

or in a matrix form

$$\begin{pmatrix} x_{ij1} \\ \vdots \\ \vdots \\ x_{ijp} \end{pmatrix} = \begin{pmatrix} \mu_{i1} \\ \vdots \\ \vdots \\ \mu_{ip} \end{pmatrix} + \begin{pmatrix} t_{j1} \\ \vdots \\ t_{jp} \end{pmatrix} + \begin{pmatrix} \varepsilon_{ij1} \\ \vdots \\ \varepsilon_{ijp} \end{pmatrix} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots 4$$

Where

$i = 1, 2, \ldots\ldots\ldots\ldots\ldots\ldots . k$ *number of groups of the variable in the study*

$j = 1, 2, \ldots\ldots\ldots\ldots\ldots\ldots . n$ *the number of observations in each variable understudy*

$r = 1,2 \ldots\ldots\ldots\ldots\ldots\ldots . p$ *is the number of vector-matrix formed*

$x_{ij} = j^{th}$ *observation in the out of the* k^{th} *groups*

μ_i *the sample mean in the* i^{th} *groups*

t_i *the treatment effect of the model*

ε_{ij} *is an independent Np (0, σ^2) multivariate normal random variable*

2.5: Hypothesis Testing

The analysis plan is based on the above stated general objective in **Section 2** to find out the effectiveness of PPP strategies. The hypothesis stated as follows;

Ho: The PPP has no significant effect on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project.

HA: The PPP has a significant effect on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project.

2.6: Data Quality Assurance

In addition to assessing the MANOVA model four assumptions, the principal and co-principal investigator maintain data quality during the research process through;

- **Review Joint data quality assurance (DQA) report;** DQA reports contain many recommendations following findings from the field. The researcher took the first step to review recommendations from Joint DQA with district biostatisticians conducted every quarter that further inform corrections of under-reporting or any deliberate distortion of data by facility focal person and IMO.
- **Data transformation;** The Public-Private facilities report submission is unevenly distributed and or facility distribution based on unequal probabilities which cause up nonnormality independent variables. The researcher used log transformation to normalises distribution before analysis.
- The in-built validation checks in DHIS2 supported eliminating entry errors.

2.7: Ethical consideration

- **Approval and review of research protocol;** This protocol was reviewed and approved by The Aids Support Organization (TASO) Research and Ethics Committee" with Institutional Review Board (IRB) No: TASOREC/068/2020-UG-REC-009. The review guided research planned steps in the protection of information and conducted by such laws and regulatory standards.
- **De-identified information;** the database provided only appropriate de-identified aggregate information from facilities. The researcher didn't have any access to specific client information. The research further made every effort to minimise the risk of breaches of confidentiality by holding datasets securely with no link to any individual client.
- **Confidentiality;** significant ethical risk of the study pertains to breaches of confidentiality. The researchers signed a code of conduct the governor every day to day operation as required of all employee of Reproductive Health Uganda (RHU) that implements WISH2ACTION project. They fully abide by the employee code of conduct which that was duly signed and address honestly in communication, data sharing.
- **Permission for further data analysis;** Written Permission from Reproductive Health Uganda (RHU) Executive director to carry out the study granted permission. This streamline effort to minimise the risk of breaches of confidentiality.

3: Data processing and findings

3.1 Data analysis

The study Data extracted was from the Reproductive Health Uganda's district health information system (DHIS2) central management information system. Quality assured final data was cleaned and analysed with STATA 13 version following the analysis plan. The significance level of $p < .05$ was used to identify the implementation strategy impact.

3.2 Outliers assumption test

The outcome variables were assessed for outlier's assumption through the box plot, as shown in Figure 1. The box plot indicates that IUCD and FP to youth under 20 at minimal are provided equally both from public-private partnership associated facilities (PPPF) and nonpublic private partnership associated facilities (NPPPF) for all Family planning methods. However, there is variation in minimum services provision for Implant and permanent methods from both public-private partnerships associated facilities (PPPF) and nonpublic private partnership associated facilities (NPPPF).

Figure 1: Boxplot of log-transformed outcome variables by Services Delivery Points
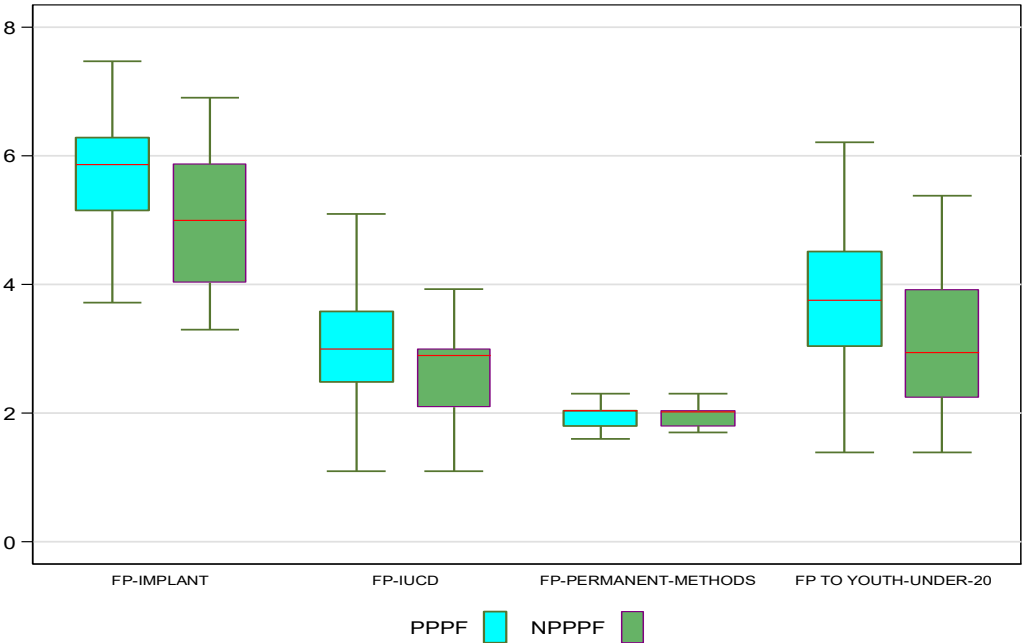
The median services are higher in PPPF for Implant, IUCD and FP to youth under 20 compared to NPPF. Permanent methods, on the other hand, shows roughly equal median services for both PPPF and NPPPF. In the plot, there are no outliers' figures that are either abnormally high or low from the range displayed. Overall boxplot suggests a normal distribution since all data are approximately symmetric

3.3 Linearity assumption test

The plot in Figure 2 confirms that Permanent methods of family planning departed from the quantile-quantile normal distribution line. It made the variable skewed right from the normal distribution line the rest of the outcome variables are linearly distributed to the normal line.

Figure 2: Quantile-quantile plot (q-norm) of the outcome variable
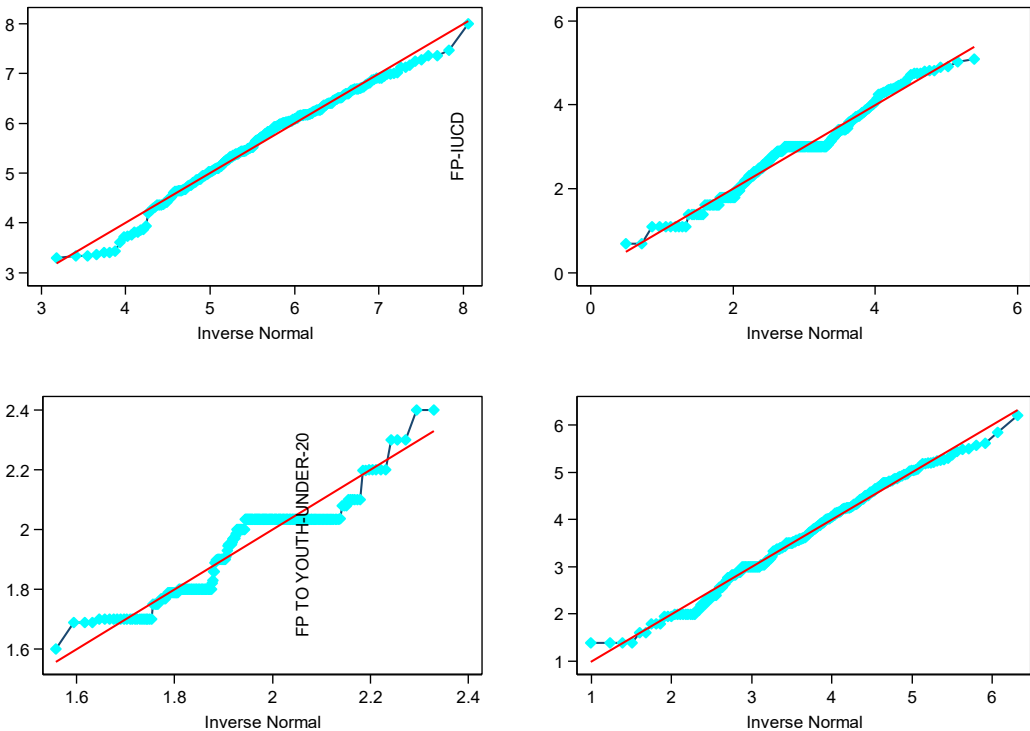
3.4 Normality assumption test

Figure 3 estimated normality distribution assumption of the independent (Outcome) variables as reported from the different services delivery points. Each dependent variable presented via histogram and normal density plot to confirm whether they sufficiently meet the assumption of approximate normal distribution. Informed by the various series of graphical diagnostic checks, the curve confirms to MANOVA assumption test that all the variables are approximately normal distributed within the normal density curve.

Figure 3: Normal density distribution of outcome variables
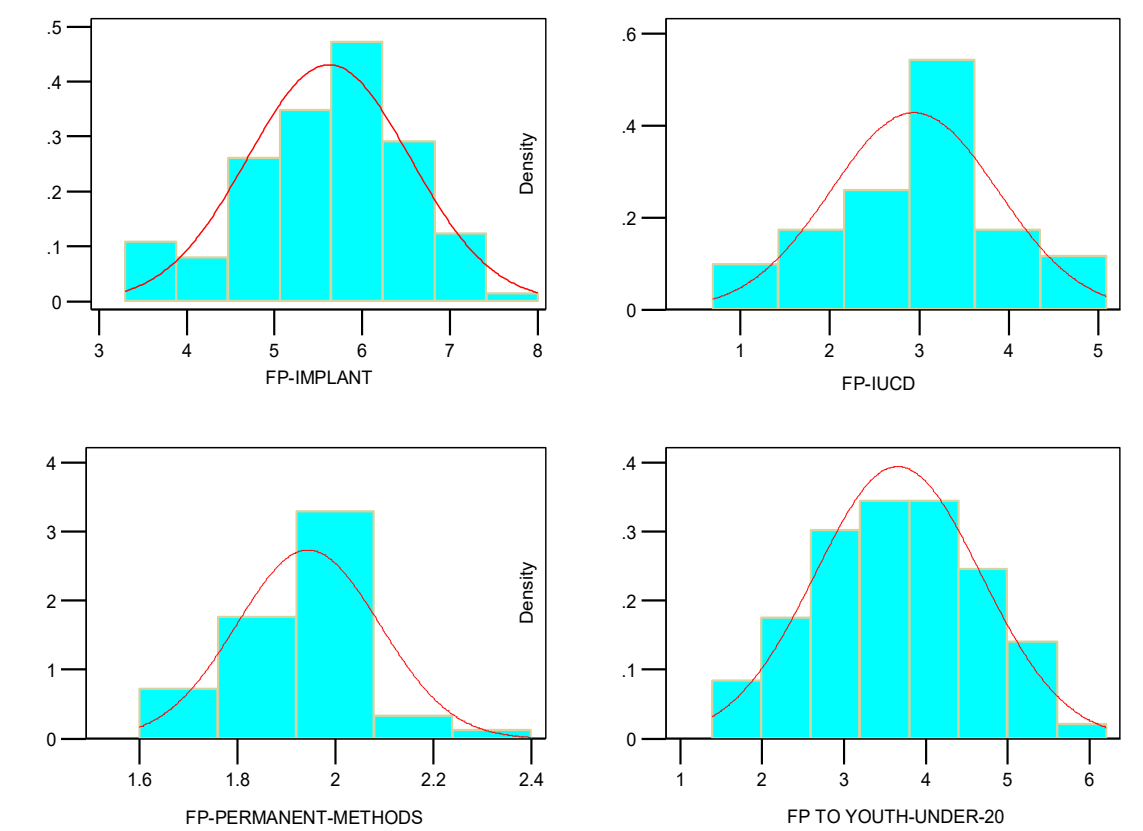
3.5 Multicollinearity and Singularity Assumption test

The multicollinearity and singularity relationship assumption of the four outcomes (dependent) variables was assessed using bivariate pairwise correlation. There was a moderate positive correlation between Implant, IUCD Permanent family planning methods, although the correlation between IUCD and Permanent methods was not significance. This sign shows that most clients can pick any family planning methods as an alternative in case other is not available. Table 5 show correlations less than .80 that implies limited multicollinearity is not an issue in the study variables.

Table 1: Bivariate pairwise correlation matrix between outcome Variables

	FP-IMPLANT	FP-IUCD	FP-PERMANENT-METHODS	FP-TO-YOUTH UNDER20
FP-IMPLANT	1.0000			
FP-IUCD	0.4004*	1.0000		
FP-PERMANENT-METHODS	0.1454	0.0506	1.0000	
FP-TO-YOUTH UNDER20	0.7861*	0.3548*	0.1100	1.0000

3.6 Homogeneity of Variance-Covariance Matrix Assumption test

Box's M test evaluated the equality of variance and covariance assumption among the dependent (Outcome) variables. In Table 2, Both the F and the chi-squared approximations indicate probability value >0.001. About Laerd Statistics (2015) suggesting level of significance ($p < .05$), we accept the MANOVA null hypothesis assumption that the observed variance-covariance matrices for the dependent (Outcome) variables across are equal (homogeneous variances and covariances) across the partnership groups.

Table 2: Box's M test of outcome Variables by Partnerships

```
  Modified LR chi2 =   18.53455
Box F(10,17171.3) =        1.77        Prob > F   =  0.0595
      Box chi2(10) =       17.75    Prob > chi2 =  0.0593
```

3.7 Power and Sample size estimation

Regarding Uganda Family planning costed implementation plan *(CIP) 2015 /16-2019/2020*) to increase uses of modern contraceptives to 50% (0.5) and reduce the unmet need to 10% (0.1) toward achieving the FP2020 commitment signed by the Uganda Government. We employed statistical methods to determine the effect of PPP (i.e. the statistical hypothesis to be tested) based on Government, projected plan to reach 68.3% statistical power.

We used power estimation in Stata to detect the significant sample size. Parameters α set at .05 (to alleviate violation of the homogeneity of variance assumption) following Uganda Family planning costed implementation plan *(CIP) 2015 /16-2019/2020*) to increase uses of modern contraceptives to 50% (0.5). The number of groups set at two, and that there is an equal variance ($\sigma_1 = \sigma_2 = \sigma$) in accessing FP services across in Health centres. Statistical power (1 – β) approximately to determine the effect of PPP (i.e. the statistical hypothesis to be tested) based on Government, projected set plan to reach 0.7 (≈68.3%) statistical power

Figure 4: Stata command for sample size estimation

```
. power twomeans 0.1 0.5, power(0.70) nratio(2)

Performing iteration ...

Estimated sample sizes for a two-sample means test
t test assuming sd1 = sd2 = sd
Ho: m2 = m1   versus   Ha: m2 != m1

Study parameters:

        alpha =     0.0500
        power =     0.7000
        delta =     2.5087
           m1 =     0.1000
           m2 =     0.5000
           sd =     1.0000
        N2/N1 =     2.0000

Estimated sample sizes:

            N =        177
```

Figure 5: Estimated total sample size for a two-sample mean test
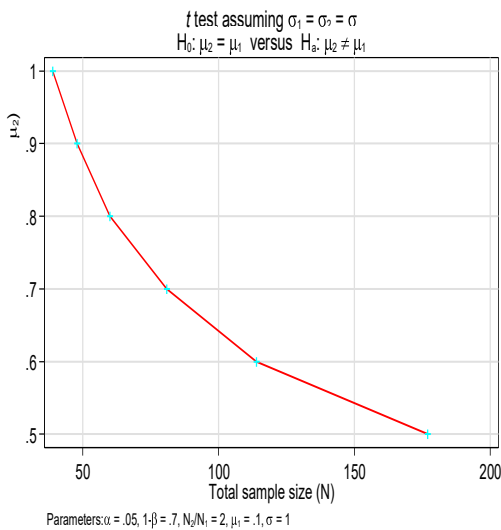
Thus, Figure 1 & 2 shows the significant sample size estimated to be **177** at a minimum that allows the null hypothesis to be correctly rejected (or accepted). The data extracted gives an adequate sample size of **228,** which support the validity of results in multivariate analysis and hypothesis testing. **Figure 2** further indicates that as the modern contraceptives prevalence rate increase, the sample size for such research keeps on reducing to determine whether the unmet need for family planning reached.

3.8 Multivariate analysis

The researcher utilised Multivariate Analysis of Variance (MANOVA) model to assess the Effect of WISH2ACTION implementation strategy on Long-Acting Reversible and Permanent (LARP) FP Methods Outcome indicator variables. These core outcome indicators variables include; Number of FP-Implants (Implanon-3yrs Implants & Jadelle-5yrs Implants), Number of FP-Intrauterine devices (IUDs) and Number of FP-Permanent Methods (Vasectomy & BTL) and Number of FP-methods provided to youth under 20 years. MANOVA assumption examined prior, and the four variables were modelled as in Table 3.

Table 3: MANOVA model

```
              Number of obs =       228

              W = Wilks' lambda      L = Lawley-Hotelling trace
              P = Pillai's trace     R = Roy's largest root

      Source │  Statistic     df    F(df1,    df2) =     F     Prob>F
─────────────┼──────────────────────────────────────────────────────
  Associate~s │ W    0.8997      1      4.0     223.0     6.21  0.0001 e
              │ P    0.1003             4.0     223.0     6.21  0.0001 e
              │ L    0.1114             4.0     223.0     6.21  0.0001 e
              │ R    0.1114             4.0     223.0     6.21  0.0001 e
─────────────┼──────────────────────────────────────────────────────
     Residual │              226
─────────────┼──────────────────────────────────────────────────────
        Total │              227
─────────────┴──────────────────────────────────────────────────────
          e = exact, a = approximate, u = upper bound on F
```

In Table 3, the p-value for each test statistic, i.e. Wilks Lambda (W), Hoteling-Lawley Trace (L), Pillai Trace (P) and Roy's Maximum Root (R) is less than 0.05; the null hypothesis rejected. The findings show enough evidence that the Long-Acting Reversible and Permanent (LARP) FP Methods Outcome variable results are significantly affected differently by WISH2ACTION implementation strategy.

3.9 Hypothesis Testing

Since the WISH2ACTION implementation strategy found to be effective in Table 3, The researcher further tested whether the null hypothesis that PPP has no significant effect on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project compared to NPPP, i.e. **Ho: $T_{PPP} = T_{NPPP}$ Vs Ha: $T_{PPP} \neq T_{NPPP}$**. In Table 4, the result shows that all test statistic (W, P, L & R) are significant at the 5% significance level. The null hypothesis is rejected, and we can infer that the impact of PPP strategy was more effective on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project and significantly different than that of the NPPP strategy.

Table 4: Testing PPP effect on outcome Variables

```
                W = Wilks' lambda        L = Lawley-Hotelling trace
                P = Pillai's trace       R = Roy's largest root


      Source  |   Statistic      df    F(df1,    df2) =    F    Prob>F
    ----------+--------------------------------------------------------
   manovatest |  W   0.1179        1     4.0     223.0    416.96 0.0000 e
              |  P   0.8821              4.0     223.0    416.96 0.0000 e
              |  L   7.4792              4.0     223.0    416.96 0.0000 e
              |  R   7.4792              4.0     223.0    416.96 0.0000 e
    ----------+--------------------------------------------------------
     Residual |                  226
    ----------+--------------------------------------------------------
                e = exact, a = approximate, u = upper bound on F
```

3.10 Post Hoc Analysis

In the Post Hoc analysis, multivariate regression analysis was used to determine the impact of the effect of the public-private partnership of the various outcome variable under analysis. Table 5 show the results of the fitted multivariate regression model. Examining the p-values indicates that public-private partnerships strategy positively affects the provision of Implant and provision of FP to under 20 by 76% & 68% respectively. However, the strategy did not show any impact on the provision of IUCD and permanent methods.

Table 5: Post Hoc Multivariate regression analysis on outcome Variables

	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Limplant						
1.Associatedfacilities	.7609349	.1584177	4.80	0.000	.4487702	1.0731
_cons	4.997117	.1453741	34.37	0.000	4.710655	5.283579
Liucd						
1.Associatedfacilities	.313347	.1679443	1.87	0.063	-.01759	.644284
_cons	2.694016	.1541163	17.48	0.000	2.390328	2.997705
LPermanentMethods						
1.Associatedfacilities	-.0179852	.0264831	-0.68	0.498	-.0701707	.0342002
_cons	1.96566	.0243026	80.88	0.000	1.917771	2.013548
Lunder20						
1.Associatedfacilities	.6844583	.1747669	3.92	0.000	.3400774	1.028839
_cons	3.100143	.1603771	19.33	0.000	2.784117	3.416168

4: Discussion

The univariate multivariate assumptions test assumptions of Outliers, Linearity and Normality Distribution Assessment test were conducted through the box, QQ-plot and histogram. There were no outliers found that could have biased the result of this analysis as well as reducing accuracy. The various series of graphical diagnostic checks, the curve confirms to MANOVA assumption test that all the variables are approximately normal distributed within the standard density curve.

Absence of multicollinearity was checked by conducting correlations among the dependent variables. In the correlation matrix, all outcome variables were found having a moderate positive correlation of less than 0.80%, which implies limited multicollinearity is not an issue in the study variables. The most important part of the results shows that most clients can pick any family planning methods as an alternative in case others is not available.

On the other hand, the statistical significance of equality of covariance matrices among the outcome variables is an assumption checked by running a Box's M test. Thus, the level of significance is typically above p-value for the test is above .05; the assumption is met. The Box's M test conform that variance-covariance matrices for the dependent (Outcome) variables are equal (homogeneous variances and covariances) across the partnership groups. It, however, indicates that there are consistent efforts employed from RHU to support the partner's facilities. We also confidently conclude that all four assumptions were not violated.

We conducted a one-way MANOVA multilevel models as it allows the measuring of several project outcome indicators in a single statistic experiment hence better chance of discovering the effect of the project strategy. All the test statistic was found significance. The WISH2ACTION implementation strategy on Long-Acting Reversible and Permanent (LARP) FP Methods Outcome was found useful. Additionally, results infer that the impact of PPP strategy was more effective in improving access on long-acting reversible and permanent contraceptives outcome under the WISH2ACTION project and significantly different than that of the NPPP strategy. The findings show that PPP has improved access and provision of Long-Acting Reversible and Permanent (LARP) FP people in line with Yanhong L et al. 2019. The project strategy employs Cluster and sub-cluster (District) coordination committees and monthly coordination meetings in all operation areas as significant stakeholder engagement that discussed critical issues regarding SRHR and clarify roles, develop trust, and achieve a shared understanding in overall goals of the project. Increased allocation by the Districts and Performance review. The District coordination meetings are designed to use multisectoral approach to family planning bringing together all decision-makers within the Districts and key external stakeholders in the end subsidised to the reach and accessibility of services to most people as compared before the NPPP.

A follow-up Post Hoc multivariate regression analysis was used to determine the impact of the PPP effect on each various outcome variable under analysis.

Figure 6: Post Hoc FP prevalences
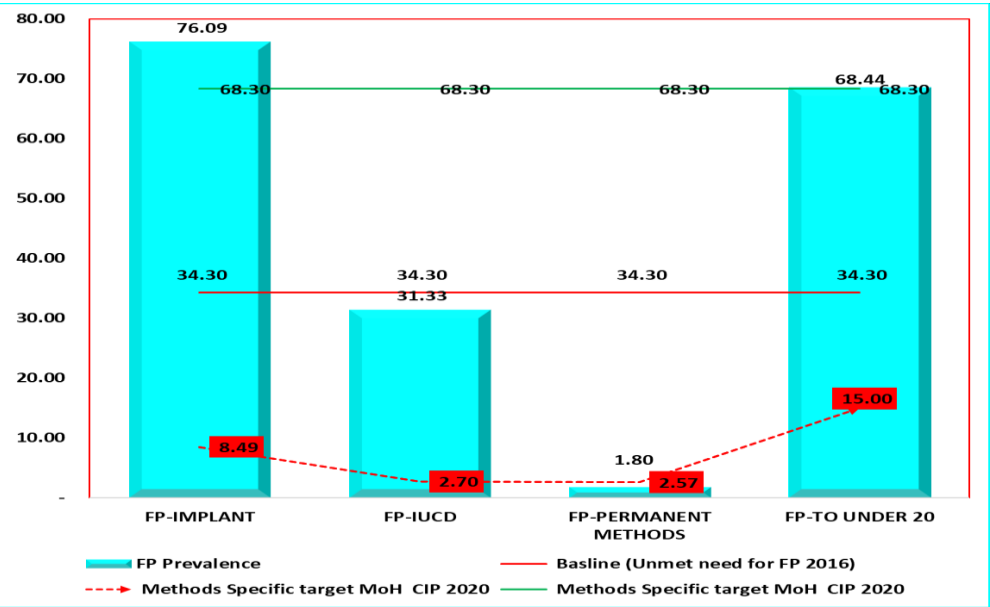
PPP has significantly improved by 76% and 68.4% access to Implant and services to Youths under 20 years. This means the project has achieved its contribution to Uganda Family planning costed implementation plan *(CIP)* 2015 /16-2019/2020) to increase uses of modern contraceptives to 50% and improving access to 68.3% toward achieving the FP2020 commitment signed by the Uganda Government. These results have been due to;

- Conducting community dialogue integrated with service delivery on the same day has proven effective in increasing uptake of SRHR services.
- Young people have been engaged through dialogue meetings, radio spots, and to take leadership in rallying other young people to demand SRHR services. YAM under RHU is spearheading Dialogue meetings in some clusters on SRHR services to young people under the age of 20 years.
- Young people have Continuously access to services through outreaches and youth events. This coupled with a partnership with up to 10 public maternity facilities to serve teenage mothers who deliver from these units with contraception—aiming at reaching out to more teenage/child mothers to prevent subsequent teenage pregnancies among this subpopulation.
- The WISH2ACTION project has continuously built the capacity of service providers' capacity from all service delivery points on Surveillance, Management and reporting.
- Capacity Building and use of local structures such as VHTs who members of the community to create demand and mobilise community hence remains one of the most vigorous measures

However, the findings show that the project strategy did not significantly improve access to IUCD and Permanent methods. We noted a few challenges that include;

- The teams are inadequately equipped with several instruments such as IUCD insertion kits, permanents methods tools, autoclaves were not provided to PPP associated facilities as per project plan.
- Continues transfer of trained staff from our partnership associated facilities to non-associated facilities has affected services delivery of mostly IUCD and permanent methods.

5: Conclusion and Recommendations

The study concludes that Public-Private Partnerships associated facilities (PPPF) enabled the delivery of services to the clients adequately. The study finds that the existence of a partnership is an opportunity to achieve the goals for reducing limited access to family planning services. The hybrid modes (outreaches, special days of care organised monthly) of service delivery have lowered the cost of seeking health services and can be adopted by other facilities to improve health outcomes

The Joint support supervision with district health team (ADHO and Biostatistician), facility staff especially the in charges and representatives from each unit during DQA encourages uniform team learning and appreciation of data. This has kept the facility moving in the right direction. We recommend it continues Support of "unable" providers to offer services is a good practice since it builds their capacity.

The delay in procurements of many types of equipment hindered service delivery, especially for the provision of permanent methods have delayed. We recommend that procurements completed in the time that would have solved the problem of delivery delays and offers an opportunity for teams to select specifications that suite the context for the client's satisfaction.

To improve uptake of IUCD and permanent methods of family palling, which is greatly affected. We recommend the delivery team to conduct services Integration of family planning in most facilities at OPD, ART clinics and maternity units. This should put into consideration the benefits of Partnerships under the WISH2ACTION strategy. The unit focal persons engaged, provided clients with methods and registers. This practice reduces missed opportunities.

Support Public-Private Partnership associated facilities (PPPF) implementing the RBF MOH program under which facilities are provided with incentives based on performance on specific indicators with emphasis on IUCD and permanent methods of FP. This will to increase access to quality family planning services, especially where provider attitudes were lacking knowledge and skills.

6: Appendix:

References

Ahimbisibwe, J. A. (2018). *Public-Private Partnership in Health Care and Its Impact on Health Outcomes: Evidence from Ruharo Mission Hospital in Uganda, Faculty of Interdisciplinary Studies, Mbarara University of Science and Technology, Uganda,* Mbarara: Faculty of interdisciplinary studies, Mbarara University of Science and Technology Uganda.

Musa, I. (2016). *EFFECTIVENESS OF PUBLIC-PRIVATE PARTNERSHIP ON DELIVERY OF HEALTH SERVICES IN MPWAPWA DISTRICT COUNCIL, TANZANIA,* MPWAPWA DISTRICT COUNCIL: Mzumbe University TANZANIA.

Pandit-Rajani, T. S. (2010). Fostering Public-Private Partnerships to Improve Access to Family Planning in Rwanda. Washington, DC: Futures Group. *Health Policy Initiative, Task Order.*, 26.

Tsui, A. O., McDonald-Mosley, R., and Burke, A. E. (2010). Family Planning and the Burden of Unintended Pregnancies. *Epidemiologic Reviews, 32*(1), 152-174. Retrieved 5 2, 2020 from https://ncbi.nlm.nih.gov/pmc/articles/pmc3115338

Uganda Bureau of Statistics (2018). *Uganda Demographic and Health Survey, 2016. Kampala, Uganda and Rockville, Maryland, USA: UBOS and IC.* Kampala: Uganda Bureau of Statistics (UBOS) and Rockville, Maryland, USA: UBOS and IC.

Uganda Ministry of Health (2014). *Uganda Family Planning Costed Implementation Plan, 2015-2020.* Kampala: Republic of Uganda Government.

Wang, Y. L. (2019). Sustainable Performance Measurements for Public-Private Partnership Projects: Empirical Evidence from China, School of Public Administration, Zhejiang University of Finance & Economics. *Hangzhou 310018, China*, 67.

`. sum Limplant Liucd LPermanentMethods Lunder20, detail`

```
                          FP-IMPLANT
-------------------------------------------------------------
        Percentiles      Smallest
 1%       3.332205       3.295837
 5%       3.806663       3.332205
10%       4.369448       3.332205       Obs                 234
25%        5.02388       3.367296       Sum of Wgt.         234

50%       5.728474                      Mean           5.620711
                         Largest        Std. Dev.        .92637
75%       6.244167       7.352441
90%       6.716595       7.354362       Variance       .8581613
95%        6.99485       7.473637       Skewness      -.3993078
99%       7.354362       8.002359       Kurtosis       2.864197
```

```
                          FP-IUCD
-------------------------------------------------------------
        Percentiles      Smallest
 1%       1.098612       .6931472
 5%       1.386294       .6931472
10%       1.609438       1.098612       Obs                 236
25%       2.397895       1.098612       Sum of Wgt.         236

50%              3                      Mean             2.9409
                         Largest        Std. Dev.      .9281909
75%       3.401197        4.89784
90%       4.304065       4.905275       Variance       .8615384
95%       4.634729        5.02388       Skewness      -.0058122
99%       4.905275        5.09375       Kurtosis       2.803946
```

```
                    FP-PERMANENT-METHODS
-------------------------------------------------------------
        Percentiles      Smallest
 1%          1.69            1.6
 5%           1.7           1.69
10%          1.75           1.69       Obs                  241
25%           1.8           1.69       Sum of Wgt.          241

50%       2.035158                     Mean            1.94389
                         Largest       Std. Dev.      .1459342
75%       2.035158            2.3
90%       2.035158            2.3       Variance       .0212968
95%           2.1            2.4       Skewness      -.0253776
99%           2.3            2.4       Kurtosis       2.782741
```

```
                       YOUTH-UNDER-20
-------------------------------------------------------------
        Percentiles      Smallest
 1%       1.386294       1.386294
 5%        1.94591       1.386294
10%       2.197225       1.386294       Obs                 236
25%              3       1.386294       Sum of Wgt.         236

50%       3.610918                      Mean           3.655792
                         Largest        Std. Dev.      1.011627
75%       4.382027        5.56452
90%       4.962845       5.620401       Variance        1.02339
95%       5.236442       5.843544       Skewness      -.1172544
99%       5.620401       6.206576       Kurtosis       2.451228
```

	FP-IMPLANT	FP-IUCD	FP-PERMANENT-METHODS	FP-TO-YOUTH UNDER20
FP-IMPLANT	1.0000			
FP-IUCD	0.4004*	1.0000		
FP-PERMANENT-METHODS	0.1454	0.0506	1.0000	
FP-TO-YOUTH UNDER20	0.7861*	0.3548*	0.1100	1.0000

```
. manova Limplant Liucd LPermanentMethods Lunder20 = Associatedfacilities

                         Number of obs =      228

                         W = Wilks' lambda      L = Lawley-Hotelling trace
                         P = Pillai's trace     R = Roy's largest root

              Source  |  Statistic     df   F(df1,    df2) =     F   Prob>F
           ----------------------------------------------------------------
            Associate~s | W   0.8997      1    4.0    223.0      6.21 0.0001 e
                        | P   0.1003           4.0    223.0      6.21 0.0001 e
                        | L   0.1114           4.0    223.0      6.21 0.0001 e
                        | R   0.1114           4.0    223.0      6.21 0.0001 e
           ----------------------------------------------------------------
             Residual |              226
           ----------------------------------------------------------------
                Total |              227
           ----------------------------------------------------------------
              e = exact, a = approximate, u = upper bound on F

. matrix c=(0,1,-1)

. manovatest , test(c)

 Test constraint
 (1)     1.Associatedfacilities - _cons = 0

                         W = Wilks' lambda      L = Lawley-Hotelling trace
                         P = Pillai's trace     R = Roy's largest root

              Source  |  Statistic     df   F(df1,    df2) =     F    Prob>F
           -----------------------------------------------------------------
            manovatest | W   0.1179      1    4.0    223.0    416.96 0.0000 e
                       | P   0.8821           4.0    223.0    416.96 0.0000 e
                       | L   7.4792           4.0    223.0    416.96 0.0000 e
                       | R   7.4792           4.0    223.0    416.96 0.0000 e
           -----------------------------------------------------------------
             Residual |              226
           -----------------------------------------------------------------
              e = exact, a = approximate, u = upper bound on F

. mvreg

Equation        Obs  Parms     RMSE      "R-sq"          F          P
-----------------------------------------------------------------------
Limplant        228    2    .8722444    0.0926    23.07212    0.0000
Liucd           228    2    .9246976    0.0152    3.481131    0.0634
LPermanent~s    228    2    .1458156    0.0020    .4612041    0.4978
Lunder20        228    2    .9622625    0.0636    15.33825    0.0001
```

	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
Limplant						
1.Associatedfacilities	.7609349	.1584177	4.80	0.000	.4487702	1.0731
_cons	4.997117	.1453741	34.37	0.000	4.710655	5.283579
Liucd						
1.Associatedfacilities	.313347	.1679443	1.87	0.063	-.01759	.644284
_cons	2.694016	.1541163	17.48	0.000	2.390328	2.997705
LPermanentMethods						
1.Associatedfacilities	-.0179852	.0264831	-0.68	0.498	-.0701707	.0342002
_cons	1.96566	.0243026	80.88	0.000	1.917771	2.013548
Lunder20						
1.Associatedfacilities	.6844583	.1747669	3.92	0.000	.3400774	1.028839
_cons	3.100143	.1603771	19.33	0.000	2.784117	3.416168

Data collection Tools-RHU Outreach Tally Sheet

Name: .... **Sex:** M   F   **Age:** .... [que ID [   ] .... **Date:** ....

Branch: .... **District:** .... **Outreach Site:** .... **Client contact:** ....

Source of information .... **Nationality:** Ugandan   Refugee   Foreigner   C[ ]nates:........... [   ] ....

Disabled: YES (if either 2 or 3 is ticked in any of 1-6 questions); **NO** (if 0 or 1 is ticked for all of 1-6 questions)

		No-no difficulty	Yes–some difficulty	Yes–many difficulties	Cannot do at all
1.	Do you have difficulty seeing, even if wearing glasses?	0	1	2	3
2.	Do you have difficulty hearing, even if using a hearing aid?	0	1	2	3
3.	Do you have difficulty walking or climbing steps?	0	1	2	3
4.	Do you have difficulty remembering or concentrating?	0	1	2	3
5.	Do you have difficulty (with self-care such as) washing all over or dressing?	0	1	2	3
6.	Using your usual language, do you have difficulty communicating, for example, understanding or being understood?	0	1	2	3

Instruction: 1. Tick √ in box for service provided, write number of FP items provided to client 2. Unique ID No: Example.03-05-18-001-Day (03), **Month** May (05), **the Year** 2018 (18), **serial number**-001

FAMILY PLANNING	Item provided		HIV & AIDS SERVICES
FP Category New Acceptor Revisit [ ]			
Previous method............... Date previous method taken;......./............/......... [ ]			HIV and AIDS - Consultation
Contraceptives - Counselling - General			HIV and AIDS - Counselling - Pre-test
Oral Contraceptives – Consultation - COC			HIV and AIDS - Counselling - Risk reduction
Oral Contraceptives – Consultation - POP			HIV and AIDS- Investigation - Rapid Diagnostic test
Injectable - Consultation (1 month)			HIV and AIDS – Invest. - Examination (Physical Examination)
Injectable - Consultation (2 months)			HIV and AIDS - Counselling - Post-test
Injectable - Consultation (3 months)			HIV and AIDS - Counselling - Psycho-social Support
Injectable - Consultation -3 month (Sayana Press)			**STI / RTI SERVICES**
Implant - Consultation (3 years)			STI / RTI - Consultation
Implant - Consultation (4 years)			STI / RTI - Counselling - Pre-test
Implant - Consultation (5 years)			STI/RTI - Investigation - Examination
Implant - Consultation - Removal -3 Yrs			STI / RTI - Counselling - Post-test
Implant - Consultation - Removal - 4 Yrs			STI / RTI - Counselling - Risk reduction
Implant - Consultation - Removal - 5 Yrs			STI/RTI - Prevention - Prophylaxis - Hep B Dose 1 vaccination
IUCD - Consultation (5 years)			STI/RTI - Prevention - Prophylaxis - Hep B Dose 2 vaccination
IUCD - Consultation (10 years)			STI/RTI - Prevention - Prophylaxis - Hep B Dose 3 vaccination
IUCD - Consultation - Removal - 5 Yrs			STI/RTI - Prev. - Prophylaxis - HPV Dose 1 vaccination-School
IUCD - Consultation - Removal - 10 Yrs			STI/RTI - Prev. - Prophylaxis - HPV Dose 2 vaccination-School
Male condom - Consultation			STI/RTI - Prev. - Prophylaxis - HPV Dose 3 vaccination-School
Female condom - Consultation			STI/RTI - Prev.- Prophylaxis - HPV Dose 1 vaccination-Community
FVSC - Consultation			STI/RTI - Prev.- Prophylaxis - HPV Dose 2 vaccination-Community
FVSC - Counselling			STI/RTI - Prev -Prophylaxis - HPV Dose 3 vaccination -Community
FVSC - Mngt-Surgical–Minilaparatomy tuballigation			STI/RTI - Management - Syndromic- Genital Ulcers
FVSC - Management - Surgical - follow up			STI/RTI - Mngt - Syndromic- Urethral/Vaginal Discharge
MVSC - Consultation			STI/RTI - Management - Syndromic- Lower Abdominal Pain
MVSC - Counselling			STI/RTI - Mngt - Syndromic- Lymph nodes enlargement
MVSC - Mngt - Surgical – no-scalpel Vasectomy			**GYNAECOLOGY SERVICES**
MVSC - Management - Surgical - follow up			Gynecology - Consultation
EC - Counselling			Gynecology - Investigation - Examination - other
EC - Consultation - Pills			Gynecology - Investigation - Examination - Manual breast exam
EC - Consultation - IUCD			Gynecology – Invest. - Examination - Bimanual pelvic exam
Diaphragm / Cervical cap - Consultation		+ -	Gynecology – Prev. - Screening - Visual inspection (VIA or VILI)
FAB - Consultation			Gynecology - Management - Medical - Menstrual Regulation
Management of side effects (Specify product given)			Gynecology - Management - Medical - Erratic menstruation
Date of Next appointment:............/............./........................			Gynecology - Management - Medical - Other
PAC SERVICES			Gynecology - Management - Surgical - Cryosurgery
PAC - Consultation			Gynecology - Counselling - Pre-test - Cervical cancer
PAC - Counselling - Pre-abortion / Options Counselling			Gynecology - Counselling - Post-test - Cervical cancer
PAC - Consultation - Initial consultation - Harm reduction model			Gynecology - Counselling - General - Breast cancer
PAC - Consultation - Follow up consultation - Harm reduction model			Gynecology - Counselling - General - other
PAC - Management - Surgical - Vacuum aspiration			**OBSTETRICS SERVICES**
PAC-Mngt- Surg-Treatment of complications after surgical procedure			Obstetrics-Consultation-Ante natal-ANC

PAC - Management - Surgical - follow up		1st	2nd	3rd	4th	4th+	8th

FAMILY PLANNING	Item provided		HIV & AIDS SERVICES
PAC - Management - Medical - Misoprostol			Obstetrics - Consultation - Post natal
PAC - Management - Medical -Mifepristone & Misoprostol			Obstetrics - Investigations - HCG - Pregnancy test
PAC -Mngt–Treatment of complications following medical procedure			Obstetrics - Investigations - Examination - Ante natal
PAC - Counselling - Post-abortion			Obstetrics - Investigations - Examination - Post natal
PAC - Management - Medical - follow up			Obstetrics - Counselling - Ante natal
Incomplete abortion - Management - Surgical - Vacuum aspiration			Obstetrics - Counselling - Post natal
Incomplete abortion - Management - Medical - Misoprostol			Obstetrics-Prevention-Prophylaxis - Ante-natal vaccinations

		IPT1	IPT2	IPT 3	IPT4 & 4+	TT1	T T 2	TT3	T T 4	T T 5
Incomplete abortion - Mngt - Medical - Mifepristone & Misoprostol										

FAMILY PLANNING	Item provided		HIV & AIDS SERVICES
Post abortion contraception			**UROLOGY SERVICES**
SUB-FERTILITY SERVICES			Urology - Consultation
Subfertility – Consultation			Urology - Counselling
Subfertility - Counselling			Urology - Investigations - Examination
Subfertility - Investigations - Examination			Urology - Management - Medical
Subfertility - Management - Medical - Hormone / ovulation therapy			Urology - Counselling
Subfertility - Management - Medical - Assisted Conception			Urology - Management - Surgery-Male Circumcision
LABORATORY SERVICES / RESULTS			Urology - Prevention- Screening - Prostate Cancer
HIV and AIDS - Investigation - Sampling procedure			**SPECIALISED SERVICES**
+ - HIV and AIDS - Investigation - Lab test - Rapid Diagnostic test			Specialized - Prevention - Screening - GBV
eMTCT- Investigation - Sampling procedure			Specialised - Counselling – GBV
+ - eMTCT- Lab test - Diagnostic Rapid test			GBV-Sexual violence
STI/RTI - Investigation - Sampling procedure			GBV-Emotional/Psychological violence
+ - STI/RTI - Investigation - Lab test -RPR			GBV-Physical violence
+ - STI/RTI - Investigation - Lab test - Hep. B			GBV Others (Specify) ....
+ - STI/RTI - Investigation – Gonorrhea - RDT			Specialised - Counselling - Relationship

Left column

+	−	Service
+	−	STI/RTI - Investigation – Clamydia - DT
		Obstetrics - Investigations - Sampling Procedure
+	−	Obstetrics - Investigations - Lab tests –HCG- Pregnancy test
		Urology - ivestigation- Sampling procedure
+	−	Urology - Investigation- PSA
		OTHER LABORATORY SERVICES
+	−	Malaria RDT
+	−	H.Pylori
+	−	Typhoid S. Typhi IgM
+	−	Typhoid S. Typhi IgG
		Blood sugar
		Other Lab services (Specify) …………………………………………..
		NON-SRH SERVICES
		Non-SRH Medical - Counselling
		Non-SRH Medical -Consultation
		Non-SRH Medical - Investigation
		Non-SRH Medical - Diarrhea -Persistent
		Non-SRH Medical - Diabetes
		Non-SRH Medical - Skin Allergy/Diseases
		Non-SRH Medical - No Pneumonia -Cough or cold
		Non-SRH Medical -Pneumonia
		Non-SRH Medical - Hypertension
		Non-SRH Medical - Pelvic Inflammatory Disease (PID)
		Non-SRH Medical - Anemia
		Non-SRH Medical - Typhoid fever
		Non-SRH Medical - Diarrhea -Acute
		Non-SRH Medical - Urinary Tract Infections (UTI)
		Non-SRH Medical - Malaria
		Non-SRH Medical - Malaria in Pregnancy
		Non-SRH-Medical-Management Others (specify) …………………………………………………………………….

Right column

Service	Vaccine
Specialised - Counselling - Sexuality	
PAEDIATRIC SERVICES	
Paediatric-Consultation	
Paediatric-Counselling	
Paediatric-Prevention	
Paediatric-Investigation	
Paediatric-Management	
PAEDIATRIC SERVICES - PREVENTION	
BCG	PCV 1
Protection At Birth for TT (PAB)	PCV 2
Polio 0	PCV 3
Polio 1	Rotavirus 1
Polio 2	Rotavirus 2
Polio 3	Measles – MR1
IPV	Measles – MR2
DPT - HepB+Hib 1	
DPT - HepB+Hib 2	
DPT - HepB+Hib 3	
Fully Immunised by 1 year	
Vit. A supplementation 1st Dose in the year	
Vit. A supplementation 2nd Dose in the year	
Dewormed 1st dose in the year	
Dewormed 2nd dose in the year	
Dewormed 1st dose in schools in the year	
Dewormed 2nd dose in schools in the year	
OTHER SRH SERVICES	
Other SRH - Consultation- Un planned pregnancy	
Other SRH - Consultation- Pre marital / marital	
Other SRH - Counselling (specify) …………………………………….	
Other SRH – Management (specify) ………………………………....	
Other SRH - Prevention (specify)……………………………………	

Remarks / Notes: (Including details on referral to RHU branch or other health Centre – Reason for referral, referral site, etc.

Name of Service Provider: .... Signature: ....

Client Consent Form For Permanent And Long Term Contraception

FACILITY NAME: …………………………………………………………………………. **CLIENT No:**

…………………………………………………………………..

CLIENT INFORMATION

Client Name:	Age:
Gender: Female: Male:	No of living children:
Address: District:………………… County;…………………………Sub-county: ………………………Village: ……………………… Tel no: ……………	Date of last pregnancy:
LNMP:	How long has the client not been in need of more children?:………

CLIENT'S CONDITION

General condition: Good:…………… Fair:……… Sick looking………..	
FP, obstetric and gynecological history	Previous medical history
Examination: 1Vital signs 2.weight 3. Height 4.B.P 5.Temperature	Genito-urinary and obstetric examination

PROCEDURES

Procedure conducted: 1.BTL 2.VASECTOMY 3.IUD 4.IMPLANT 5.OTHERS (specify)	Outcome: Successful: Failed: Action taken/ comment:

POST PROCEDURE CARE

General condition:	Medication prescribed
Informed about care: Yes No	

Name of surgeon: ………………………………………………….. **Name of assistant**: ………………………………………………

INFORMED CONSENT FOR PERMANENT AND LONG-TERM FP CLIENTS.

I the undersigned WISH2ACTION to have contraception by the following procedure:
…………………………………………………………………………………………

(Specify contraception method to be offered)

I understand the following:

1. There are temporary methods of Contraception I can use instead of permanent contraception for planning my family.

2. The procedure is a surgical one. Like all surgical procedures there are some risks and side effects, the details of which have been explained to me. I will still be able to have sexual relations with my partner. I will continue to have menstrual cycles (for females)

3. The procedure should be considered permanent. However, no surgical procedure can be guaranteed to work 100% on all people. There is a small failure rate. If the operation is successful, I will not be able to have any more children

4. I have applied for this procedure on my own free will without coercion or inducement. I can change my mind and refuse the procedure and no medical, health or other services or benefits will be withheld from me as a result.

CLIENT NAME AND SIGNATURE: NAME AND SIGNATURE OF PERSON CONSENTING CLIENT

 …………………………………………………………………….
          …………………………………………………………………………………….

Date…………….............................   Date: ……………………………………………….

Facility Monthly Report (WISH2ACTION2ACTION PROJECT)

FACILITY NAME: .... **DISTRICT:** ....

SUB COUNTY: .... **MONTH:** .... **YEAR:** ....

Family Planning Method/Years	NEW USERS				CONTINUING ACCEPTORS				Commodities Issued			
	10-14 Yrs.	15-19 Yrs.	20-24 Yrs.	25+ Yrs.	10-14 Yrs.	15-19 Yrs.	20-24 Yrs.	25+ Yrs.	10-14 Yrs.	15-19 Yrs.	20-24 Yrs.	25+ Yrs.
Oral Contraceptives (COC)												
Oral Contraceptives (POP)												
Injectable - 1 month												
Injectable - 2 month												
Injectable - 3 month - Depo												
Injectable - 3 month Sayana press												
Implant - 3 years - Implanon												
Implant - 5 years - Jadelle												
IUCD - 10 years - Copper T 380												
Male condom												
Female condom												
Sterilisation (Tubal ligation)												
Sterilisation (Vasectomy)												
Emergency Contraception - Pills												
Emergency Contraception - IUCD												
TOTALS												
Abortion Services	10-14 Yrs.	15-19 Yrs.	20-24 Yrs.	25+ Yrs.	Referrals	10-14 Yrs.	15-19 Yrs.	20-24 Yrs.	25+ Yrs.			
Post Abortion Care - Medical												
Post Abortion Care - MVA												

NAME OF PERSON REPORTING………………………………………………………..

DESIGNATION………………………………….Contact…………………………………….

SIGNATURE……………………………………….DATE……………………………………

RECEIVED BY………………………………………………………………………………….

DESIGNATION……………………………………Contact………………………………………….

DATE…………………………………………. SIGNATURE………………………….…………….

Data Extraction tool

Period (months)	Facility	Facility Partnership type	Item Provided-Vasectomy 10 - 14 Yrs	Item Provided-Vasectomy 15 - 19 Yrs	Item Provided-Vasectomy 20 - 24 Yrs	Item Provided-Vasectomy 25 Yrs +	Item Provided-BTL 10 - 14 Yrs	Item Provided-BTL 15 - 19 Yrs	Item Provided-BTL 20 - 24 Yrs	Item Provided-BTL 25 Yrs +	Item Provided-IUCD - 10 years 10 - 14 Yrs	Item Provided-IUCD - 10 years 15 - 19 Yrs	Item Provided-IUCD - 10 years 20 - 24 Yrs	Item Provided-IUCD - 10 years 25 Yrs +	Item Provided-IUCD - 5 years 10 - 14 Yrs	Item Provided-IUCD - 5 years 15 - 19 Yrs	Item Provided-IUCD - 5 years 20 - 24 Yrs	Item Provided-IUCD - 5 years 25 Yrs +	Item Provided-Implant - 3 years 10 - 14 Yrs	Item Provided-Implant - 3 years 15 - 19 Yrs	Item Provided-Implant - 3 years 20 - 24 Yrs	Item Provided-Implant - 3 years 25 Yrs +	Item Provided-Implant - 4 years 10 - 14 Yrs	Item Provided-Implant - 4 years 15 - 19 Yrs	Item Provided-Implant - 4 years 20 - 24 Yrs	Item Provided-Implant - 4 years 25 Yrs +	Item Provided-Implant - 5 years 10 - 14 Yrs	Item Provided-Implant - 5 years 15 - 19 Yrs	Item Provided-Implant - 5 years 20 - 24 Yrs	Provided-Implant - 5 years 25 Yrs +	Total FP- Implant	Total FP-IUCD	Total FP-Permanent Methods (Vasectomy & BTL)	Total FP provided to Youth under 20
Jan-20	RHU Lira	PPPF		1				7	5	136		230	710	3665					1	1036	3073	9561						2	502	1524	5697	21396	4605	148	1779
Mar-20	Dokolo Hospital	NPPPF				4		1		50		261	588	3065					9	1128	2437	5418							669	1315	4045	15021	3914	51	2071