

PPIUD Initiative

International Maternity Expo, November 2019

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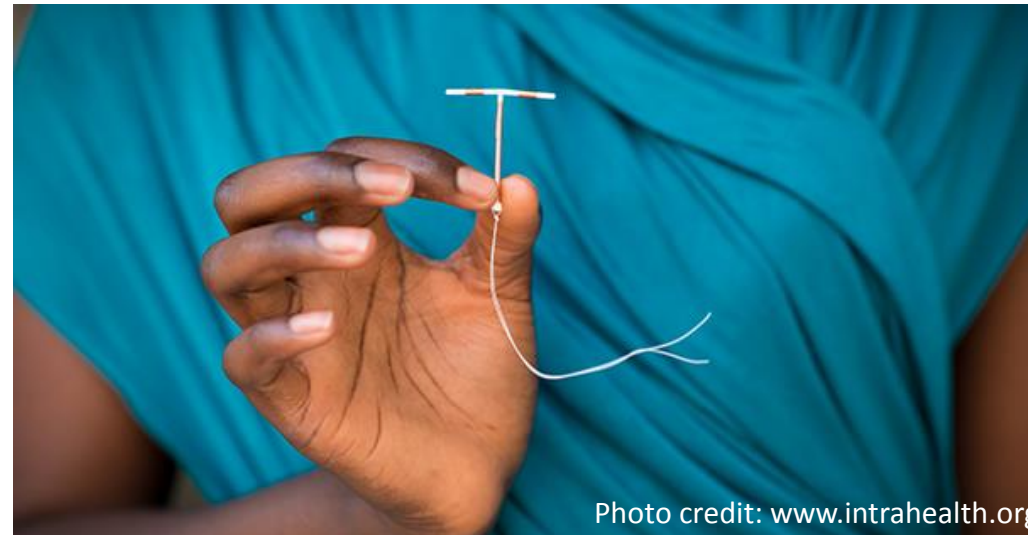


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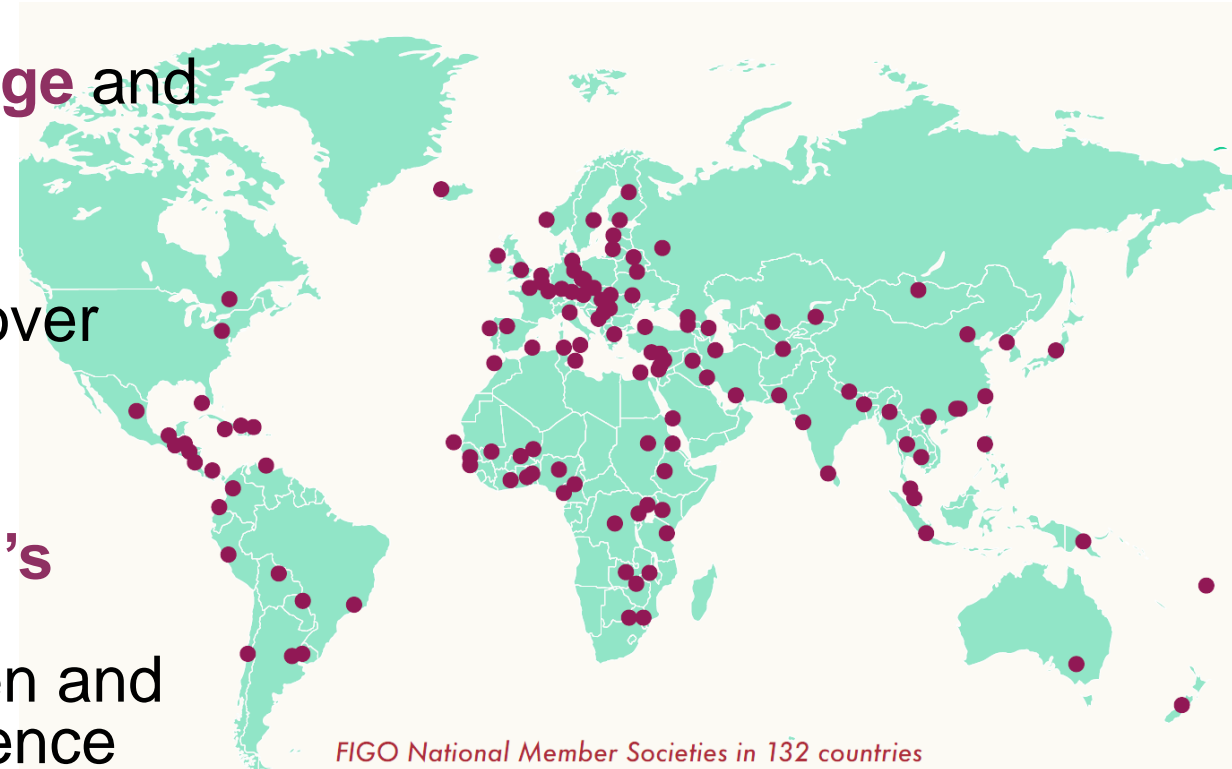
Session outline

- Introduction to FIGO
- Overview of the global unmet need for post-partum family planning (PPFP)
- Benefits of PPFP in a global context
- Outline of the PPIUD initiative
- “Nurse-Midwives in Kenya: experts in post-partum insertion of IUD: a new task shared (**Winnie Shena**)
- “Clinical outcomes of postpartum TCU380A Intrauterine Contraceptive Device when provided by Midwives in Tanzania” (**Sebalda Leshabari**)
- Questions and answers

The International Federation of Gynecology and Obstetrics (FIGO)



- **Founded in 1954** as part of a growing international movement to **share knowledge** and **align best practice**
- Membership base of national societies in over **132 countries**
- Dedicated to the **improvement of women's health and rights** and to the reduction of disparities in healthcare available to women and newborns, as well as to advancing the science and practice of obstetrics and gynaecology



Disparities in global unmet need

Figure 3. Demand for family planning satisfied with modern contraceptive methods among married/in-union women age 15-49, 2017 (per cent)

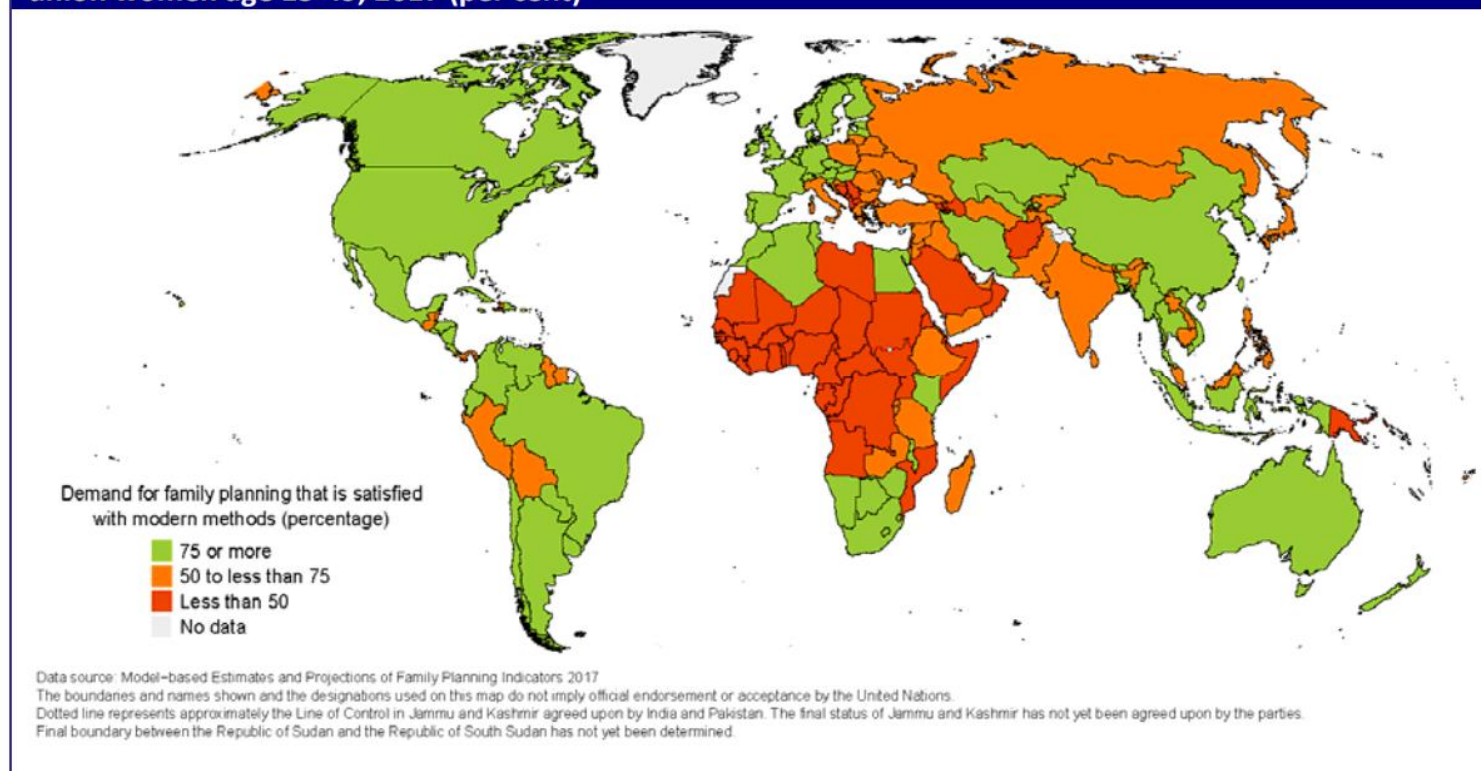


Image credit: United Nations, family planning division, 2017

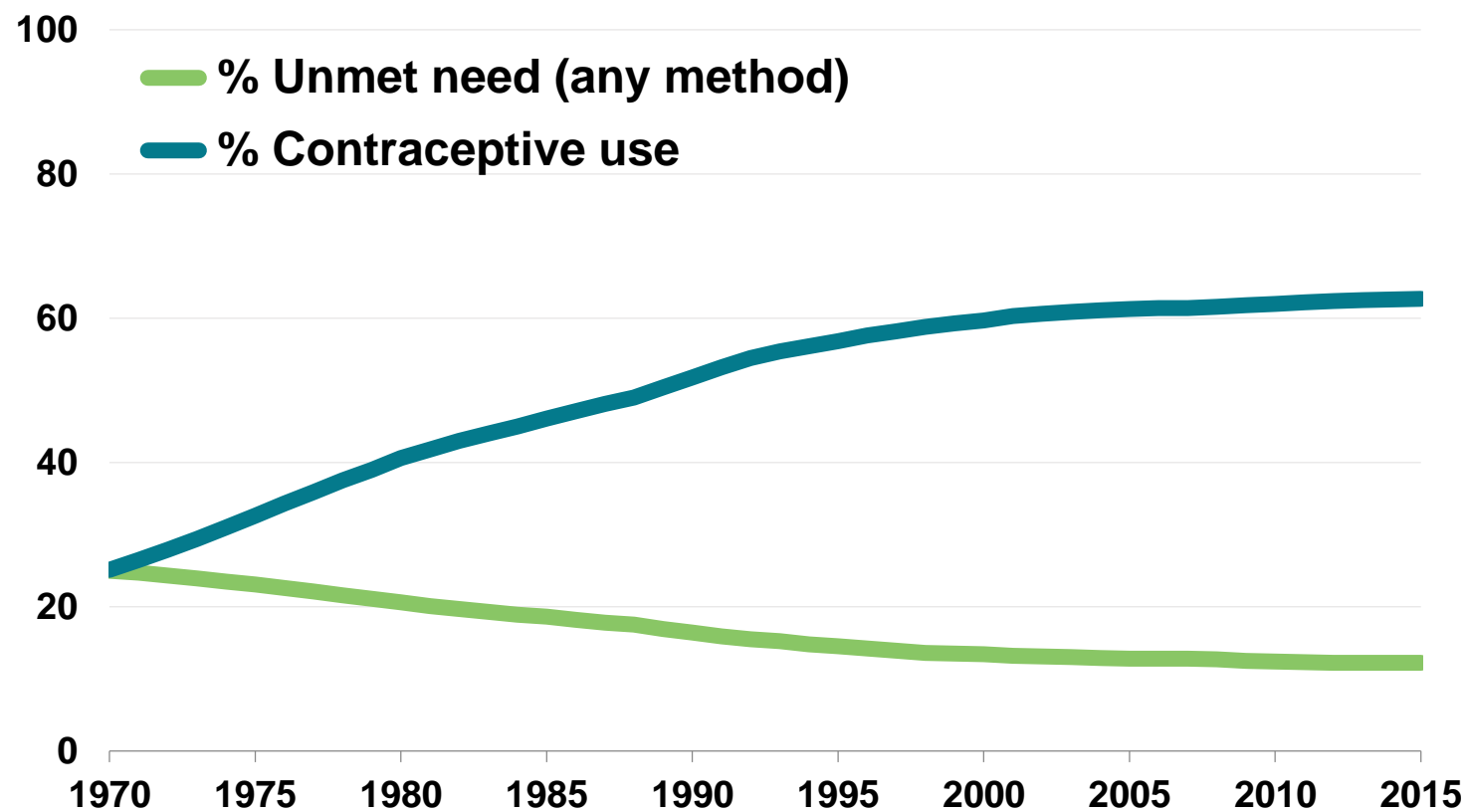
As of 2017, **885 million** women wanted to avoid pregnancy but **only 3/4s** were using a modern contraceptive

214 million were in developing regions

21% in Sub-Saharan Africa

~70 million in southern Asia (Guttmacher Institute, 2017)

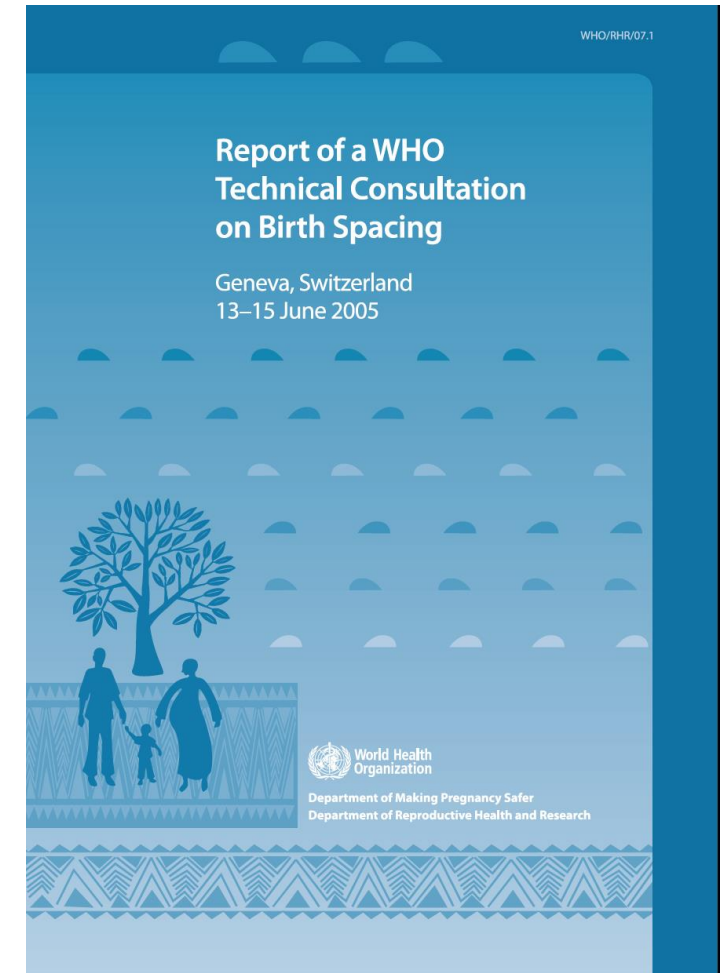
Unmet need



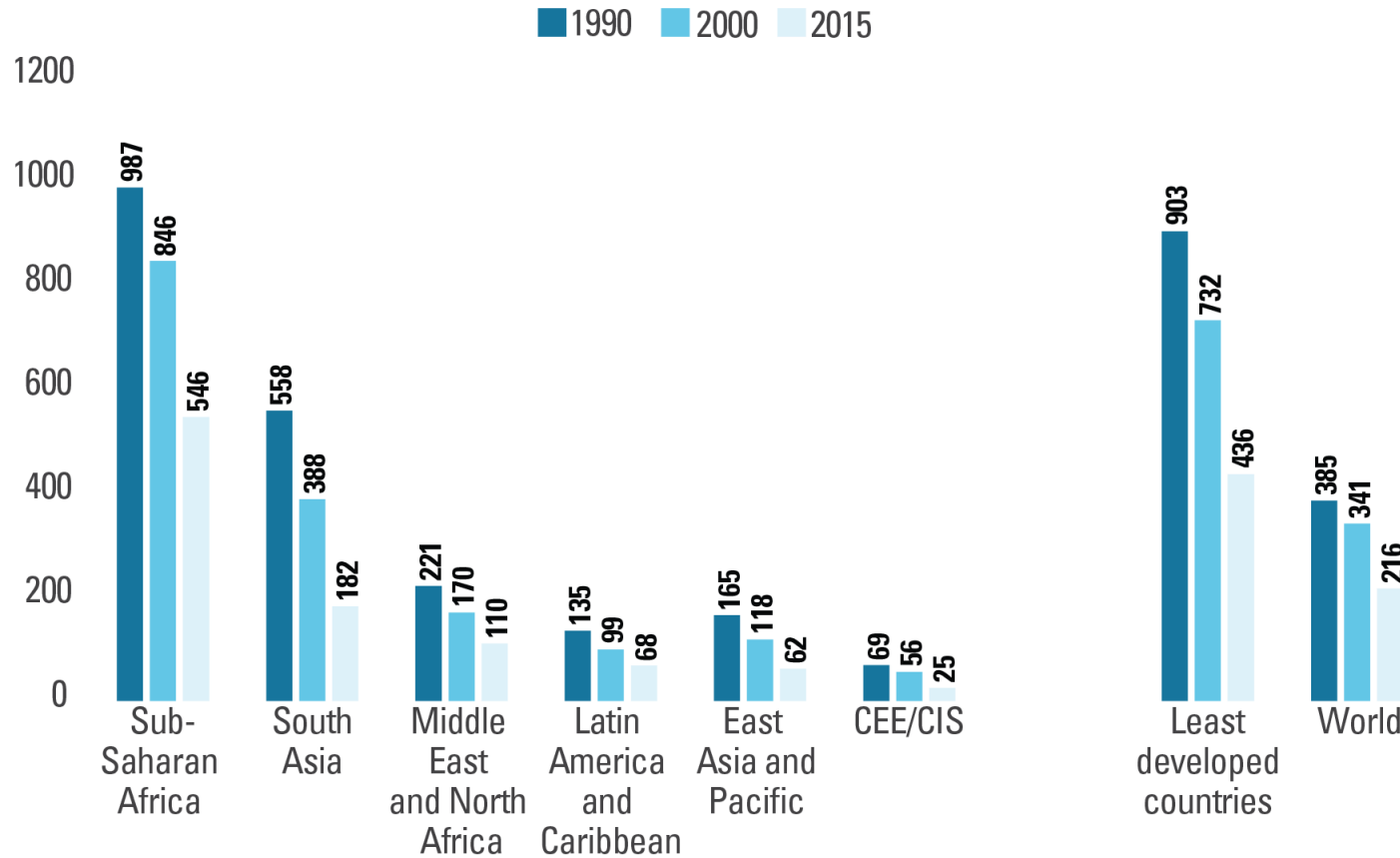
Source: United Nations Population Division, 2015

Postpartum Family Planning

- The prevention of unintended pregnancy and closely spaced pregnancies through the first 12 months following childbirth (WHO)
- Recommended interval before attempting the next pregnancy is at least 24 months
- PPFP is one of several proven “High Impact Practices” identified by a technical advisory group of international experts
- Secondary analysis of postpartum women from across 21 LMICs revealed an unmet need for PPFP of 61% (Moore, 2015)



Lifetime risk of maternal death



Source: World Health Organization, UNICEF, United Nations Population Fund and The World Bank, *Trends in Maternal Mortality: 1990 to 2015*, WHO, Geneva, 2015.

The **lifetime risk of maternal death** is the probability that a 15-year-old girl will die from complications of pregnancy or childbirth over her **lifetime**; it takes into account both the **maternal mortality** ratio and the total fertility rate

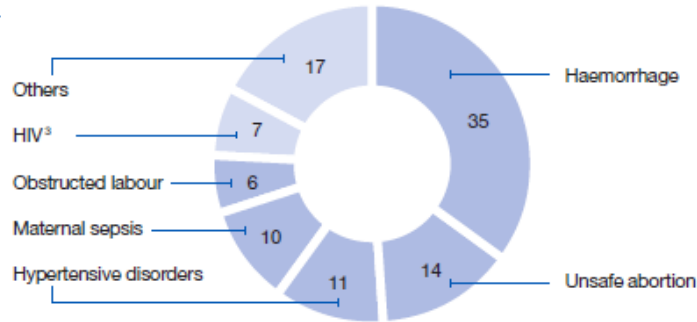
The lifetime risk of maternal death in high-income countries is 1 in 3,300, compared to 1 in 41 in low-income countries (WHO, 2015)

Risk of maternal mortality might increase with birth to pregnancy intervals < 12 months (WHO, 2005)

Preventing maternal mortality and morbidity

Causes of maternal death¹

100% = 358,000
(2008)



In 2012 it was estimated that optimal use of family planning could **reduced maternal mortality by 30%** (Cleland, 2012)

Fully meeting the unmet need for modern contraception would result in an estimated **76,000 fewer maternal deaths** each year (Guttmacher, 2017)

Health intervention ²		Potential to reduce maternal mortality ² Thousands of lives saved (% of current deaths)		Targets deaths due to... ²
Family Planning	Family timing/spacing and contraception	107	30%	(Preventive) All causes
Safe abortion	Vacuum aspiration or medical abortion	46	13%	Unsafe abortion
Maternal care	Prevent haemorrhage	34	9%	Haemorrhage
	Treat haemorrhage ⁴	29	8%	Haemorrhage
	Prevent/treat infection	21-28	6-8%	Sepsis
	Caesarean section	27	7%	Obstructed labour
	Prevent eclampsia / treat pre-eclampsia	24	7%	Hypertensive disorders

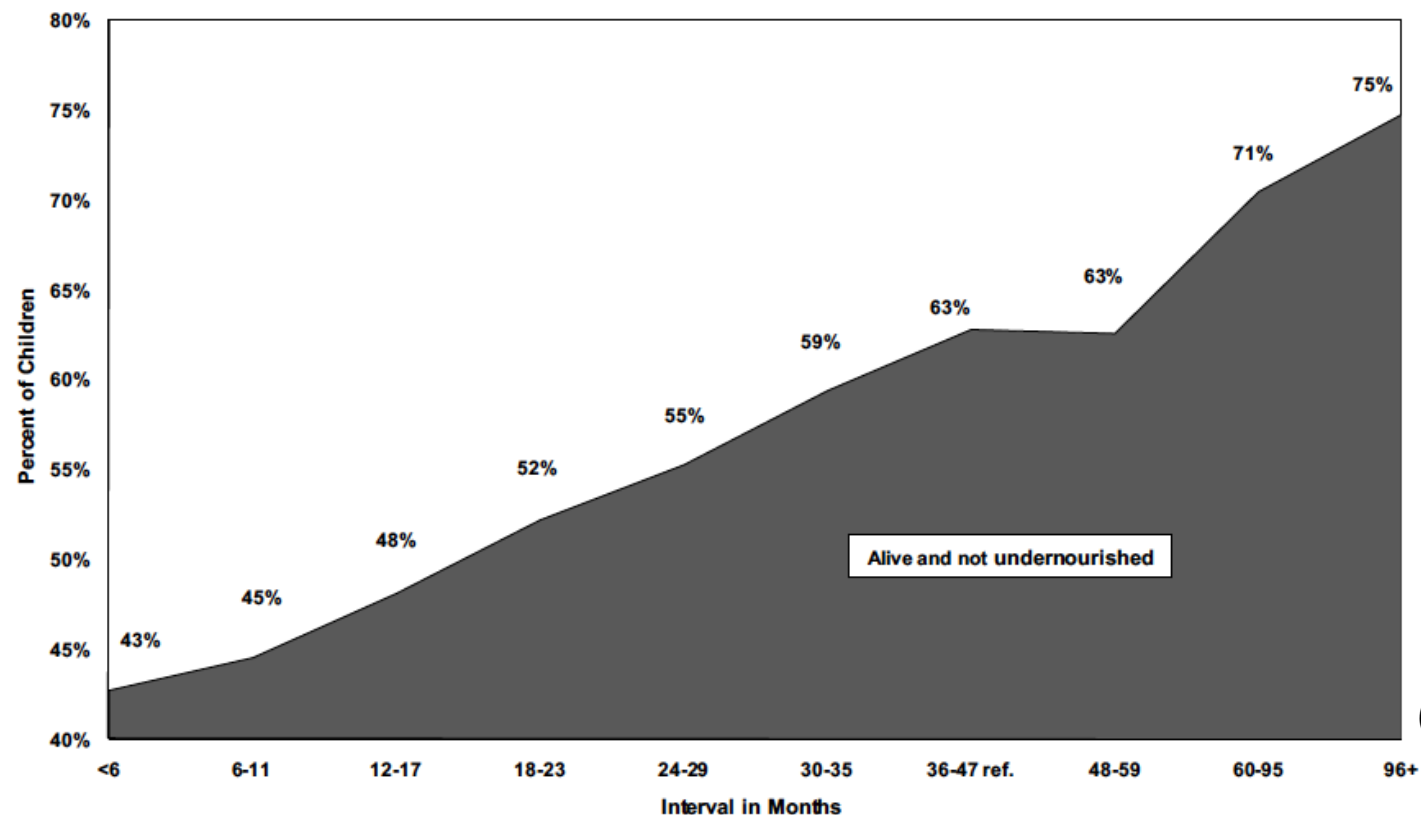
(% of maternal deaths saved)

Birth to pregnancy (BTP) **< 6 months** associated with increased risk of premature rupturing of membranes, anaemia, puerperal endometritis and pre-eclampsia (WHO, 2012)

Saving Mothers' Lives: Transforming Strategy into Action. Report of the Maternal Health Working Group 2012.

Neonatal Outcomes and Child Survival

Figure 15 Percent of Children Alive and Not Undernourished
by Duration of Preceding Birth to Conception Interval



(Rutstein, 2008)

Why focus on PPIUD?

Can be inserted immediately post-partum as one stop procedure: **MEC category 1**

After 6 week check women don't need to return (women often travel long distances and have limited resources to return for contraceptive services)

No ongoing need for commodities (government clinics often experience stock-outs)

More **cost-effective** than short-acting contraceptives and other LARCs (Lynch et al. 2018)

Capitalises on increasing rates of institutional deliveries

89 million unintended pregnancies, 2017

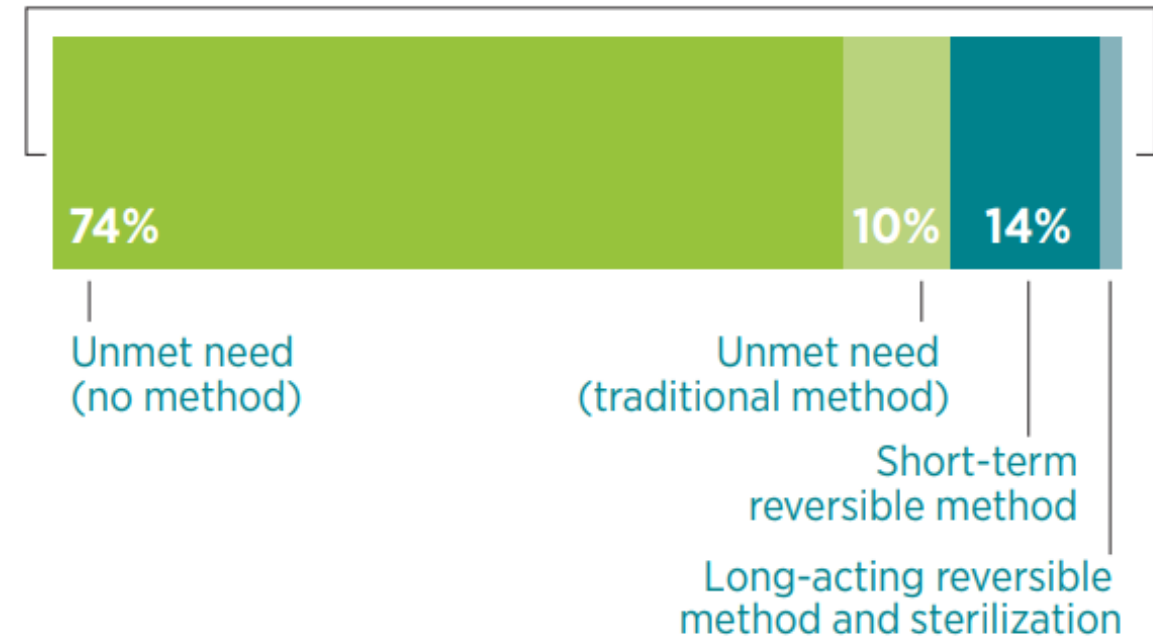


Image credit: Guttmacher
2017

Background to the initiative

2013 – 2015 Phase 1 - pilot

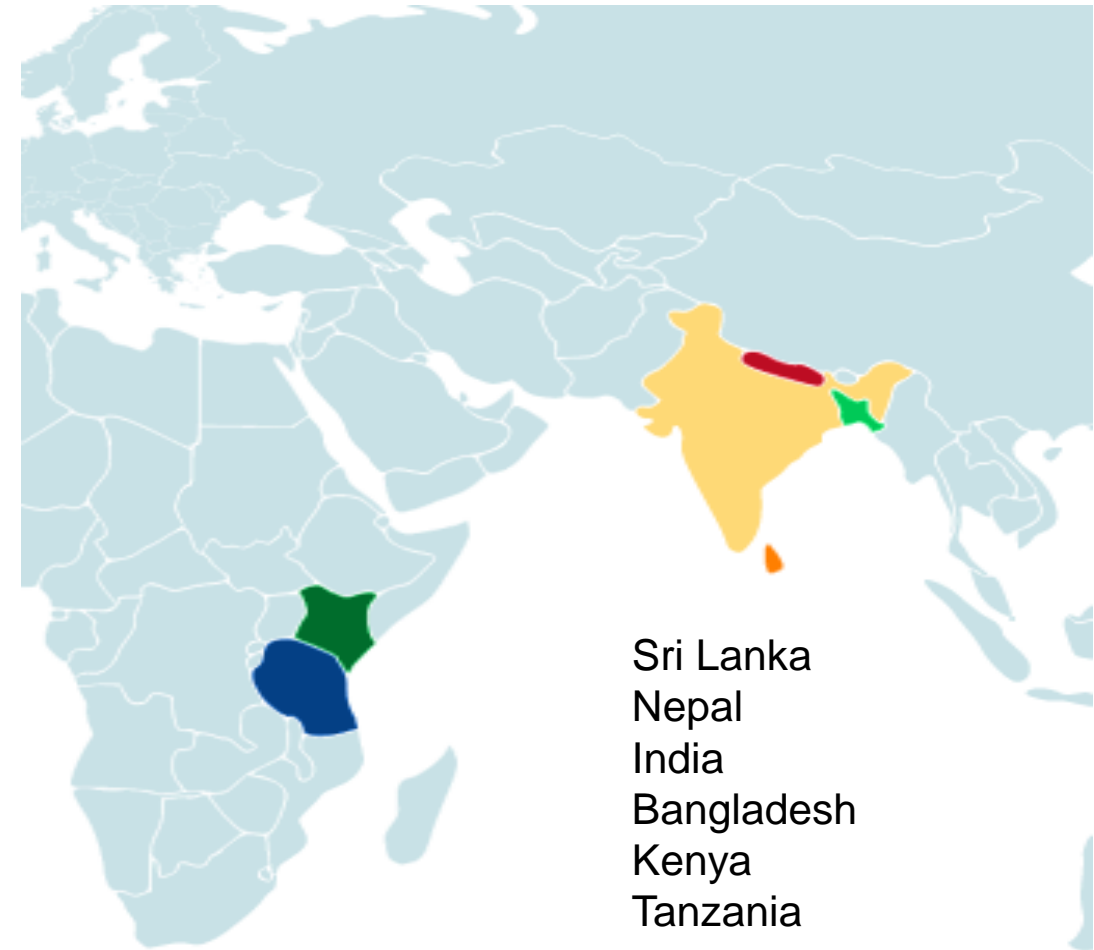
2015 – 2018 Phase 2 - expansion

2018 – 2020 Phase 3 – sustainability

Working with national O&G Societies

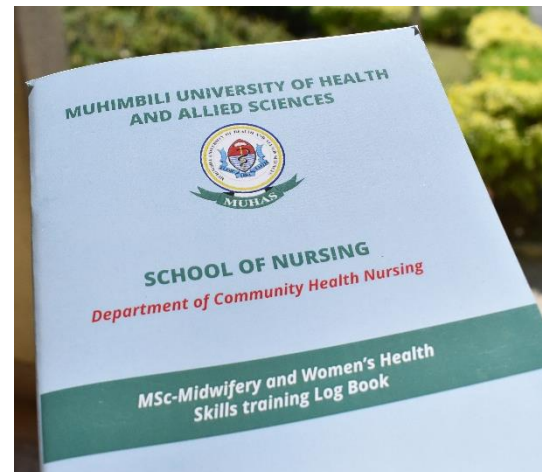
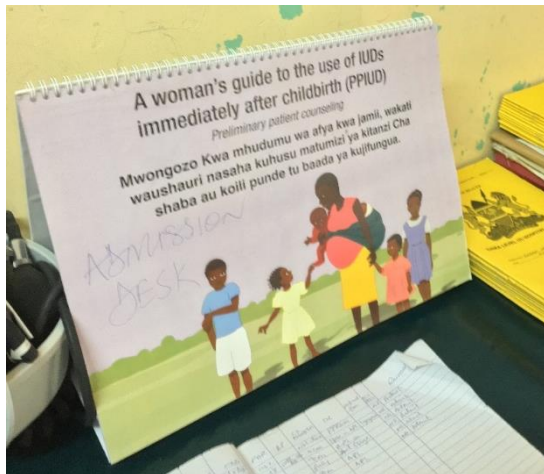
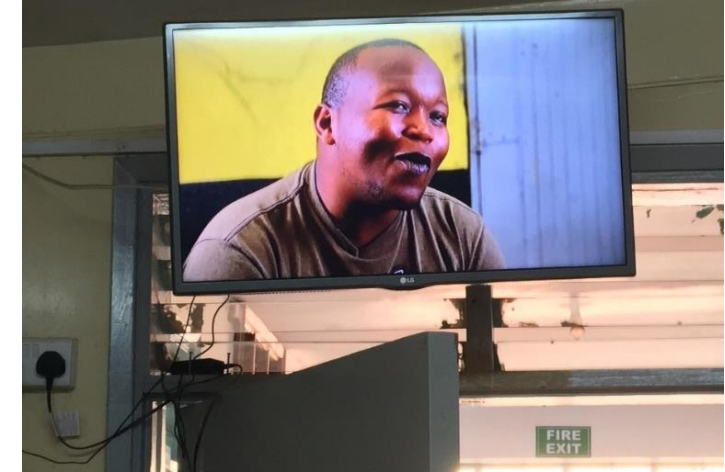
Aim to integrate PPIUD service into routine clinical practice

48 referral hospitals with large maternity units and some peripheral sites



Initiative activities

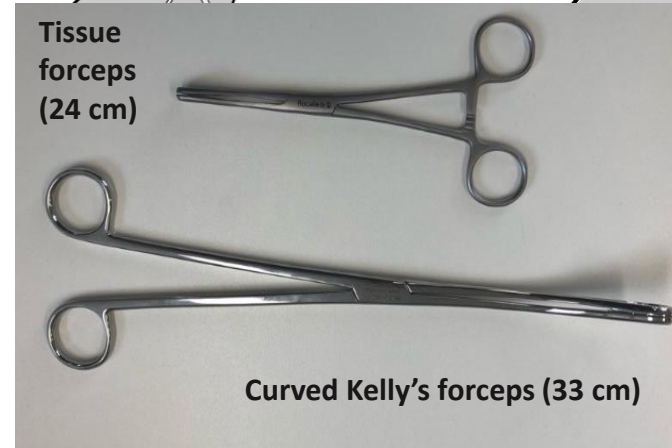
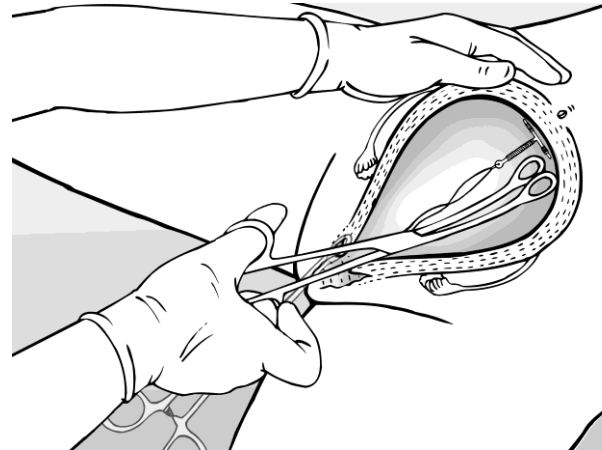
- **Sensitisation** with healthcare professionals, managers and policy makers on the importance of PPFP/PPIUD
- **Training** medical and nursing/midwifery staff on PPFP counselling and PPIUD counselling and insertion
- **Building capacity** of facilities to deliver PPIUD services



- **Creation of IECs** (posters/leaflets/videos)
- Working with training institutions to **revise curriculum** to include PPIUD
- Supporting the inclusion of PPFP indicators in **national data** collection systems

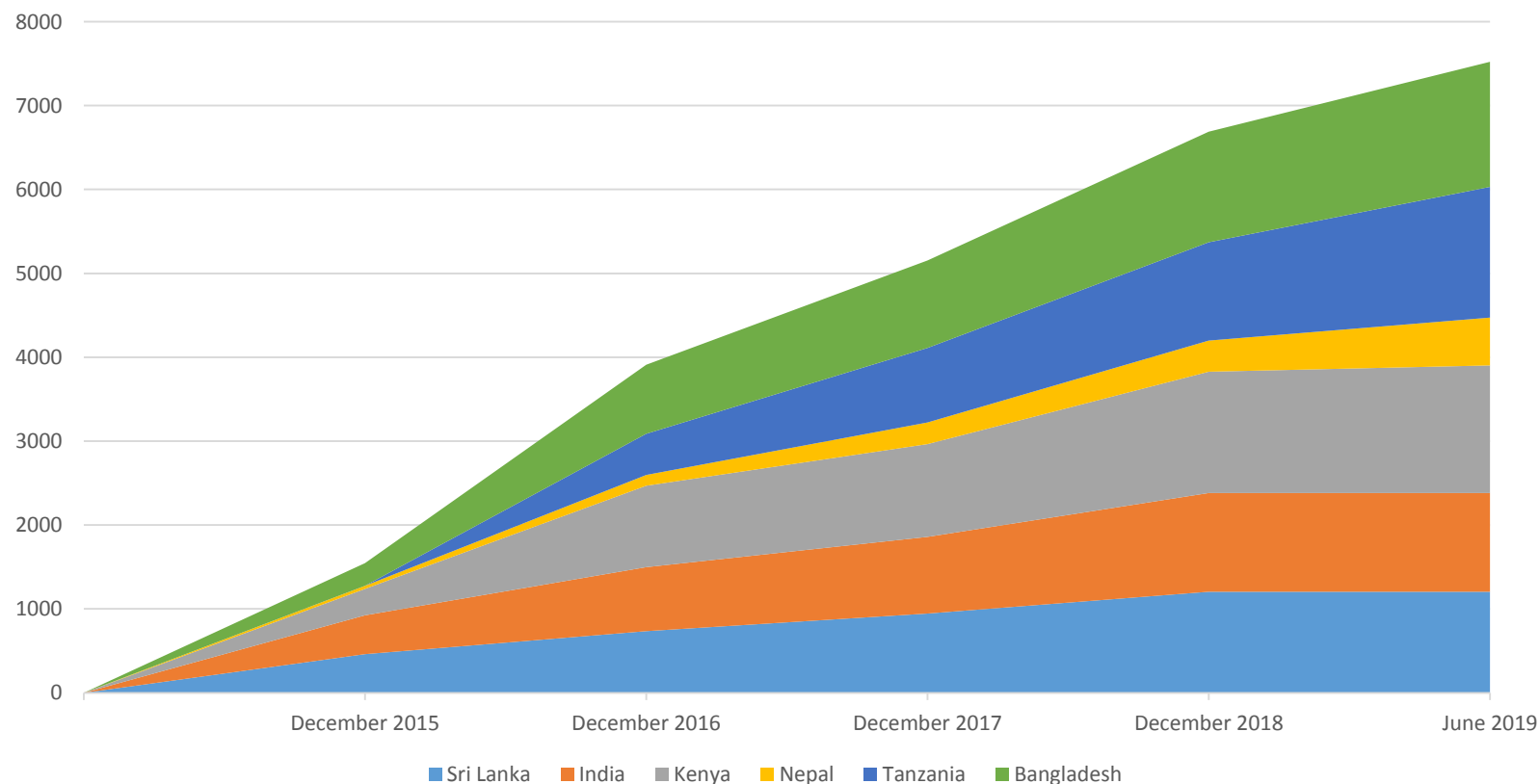
Insertion technique

- Trained to insert using Kellys curved forceps
- Focus on high placement at the uterine fundus
- Competency only achieved after 3 to 5 MAMA-U and a minimum of 5 live insertions
- Insertion via c-section also taught



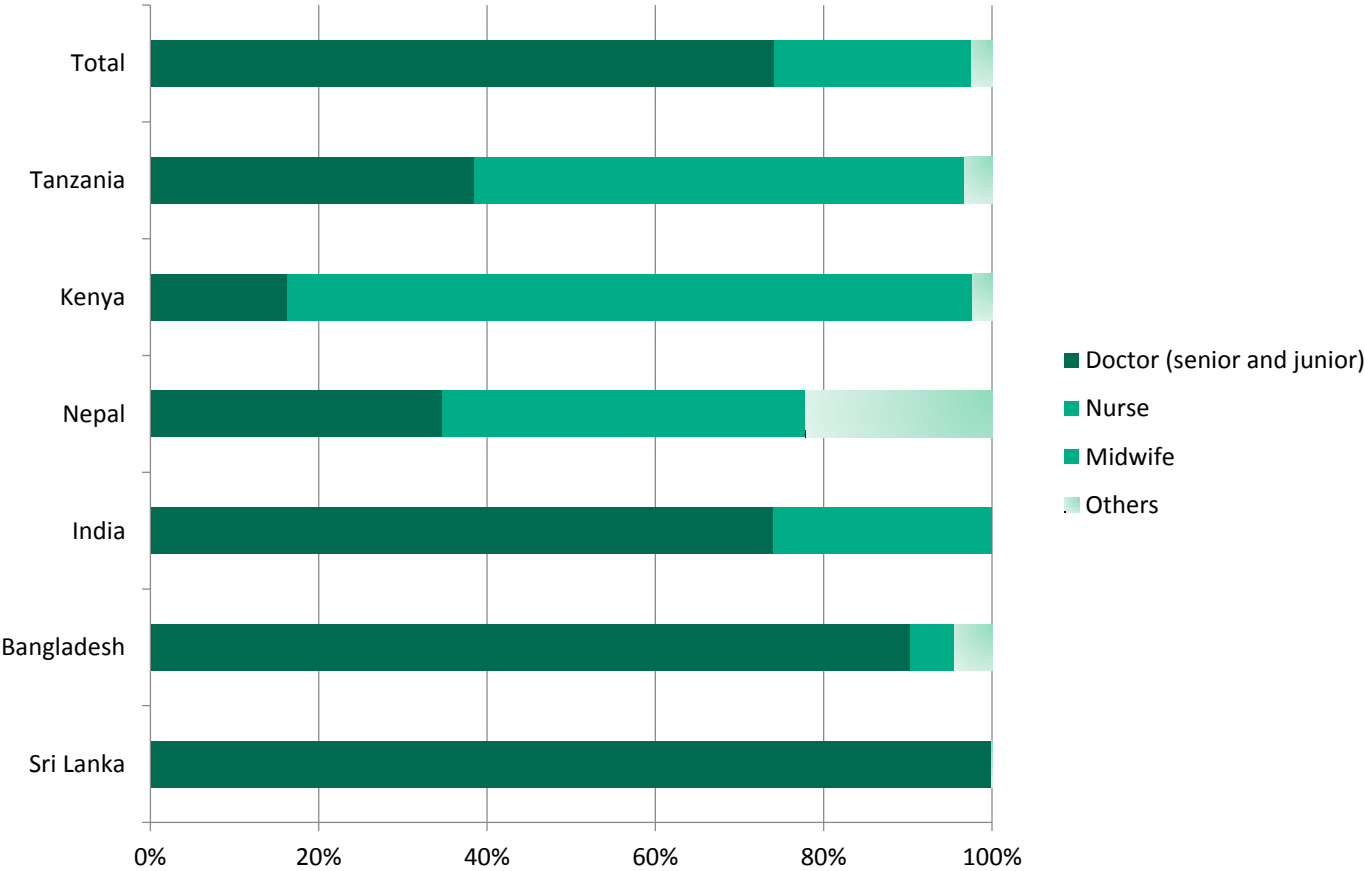
Providers trained

Cumulative providers trained (insertion and counselling) January 2015 - June 2019



By June 2019, **7,737** providers had been trained in PPFP counselling and PPIUD insertion
10,641 additional providers had been trained in PPIUD inclusive PPFP counselling

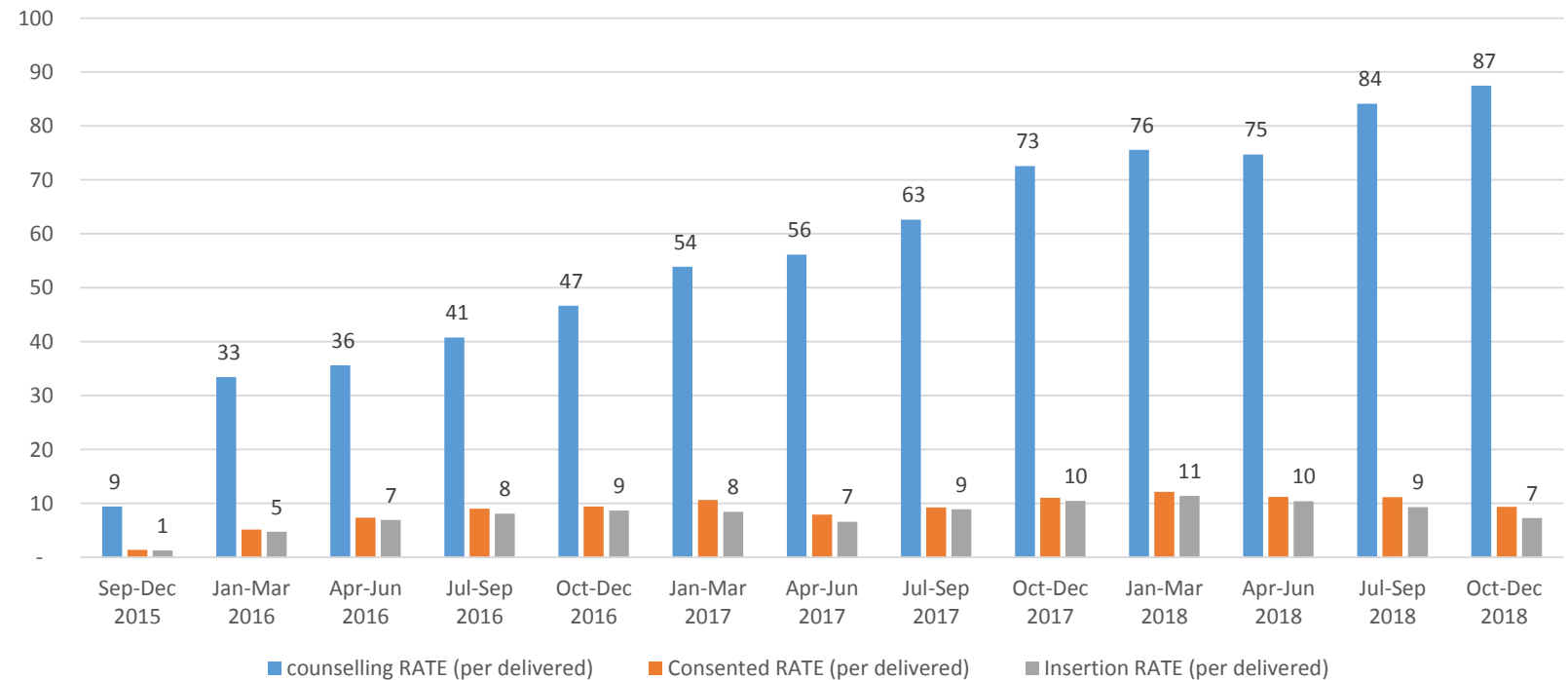
Services provided by cadre type



Counselling, consent and insertion

We have counselled more than **640,000** women (54% of all delivering in the facilities)
Of those counselled, **11%** have chosen to and received a PPIUD

Counselling, Consent and Insertion rates across all 6 countries September 2015 - December 2018*



*Data from Jan 2019 onwards not available from all countries therefore not included

Expulsions and removals

Follow-up data analysed for 18,960 women showed expulsion and removal rates comparable to interval IUD

Expulsion: 2.6%
Removal: 3.7%

Threads not visible 29% cases

< expulsion after C-S, between 10 minutes and 48 hours and following nurse insertion

TABLE 5 Details of outcomes following PPIUD insertion for each country participating in the initiative.

	Sri Lanka	Bangladesh	India	Nepal	Kenya	Tanzania	All countries
Period of time monitored	1 May 2014 to 30 Sep 2017	7 Nov 2015 to 30 Sep 2017	1 Dec 2015 to 30 Sep 2017	1 Dec 2015 to 30 Sep 2017	24 Sep 2015 to 30 Sep 2017	11 Mar 2016 to 30 Sep 2017	
No. facilities	18	6	6	6	6	6	48
No. deliveries	291 861	87 951	72 195	119 844	72 340	81 456	725 647
No. providers trained	932	1014	914	210	1007	827	4904
No. insertions	8055	5255	16 643	2503	1651	2659	36 766
No. followed up	3375	2829	8786	2091	716	1163	18 960
Follow-up rate, %	42	54	53	84	43	44	52
No. expulsions ^a	66	84	198	80	27	14	469
Expulsion rate, %	2.3	3.3	2.3	3.9	4.3	1.2	2.6
No. removals ^b	121	71	229	150	16	95	682
Removal rate, %	3.7	2.8	2.6	7.4	2.6	8.3	3.7

^aMissing data in 850 from 18 960 reports collected on expulsion (rates calculated excluding missing data).

^bMissing data in 526 from 18 960 reports collected on removals (rates calculated excluding missing data).

* Data analysis from publication “FIGO Postpartum intrauterine device initiative: complication rates across six countries”

Key Learnings

PPFP is vital to **bridge the gap of unmet contraceptive need** and reduce maternal mortality and adverse neonatal outcomes and to improve child survival

PPIUD is **safe and effective** and has **low expulsion, infection and perforation rates** when correct insertion technique is mastered

Task shifting allows the method to be more **accessible to women** making services efficient and cost effective

Having a **one stop procedure** is invaluable, particularly in LMICs and to many women may be life changing.



Photo credit: www.laerdal.com

Nurse-Midwives in Kenya, Experts in Post-Partum Insertion of IUD: A New Task Shared

Winnie Shena
Corresponding author

Acknowledgement

- **International Federation of Gynecology and Obstetrics. (FIGO)**
 - PPIUD Initiative –Team Led by Professor Sir Arul and Dr Anita Makins.
- **Kenya Obstetrics and Gynecology Society (KOGS) and the Kenya PPIUD Project team led by.**
 - The president Dr Elly Odongo
 - The president Emeritus Dr Anne Kihara
- **The Nursing Council of Kenya-** the board of management and staff led by.
 - The Registrar – Edna Kimayio (Mrs.)

Acknowledgement

- The county Government of the six Counties that participated
(Kiambu, Nakuru, Kisumu, Meru, Mombasa & Uasin Gishu) and their referral hospitals.
- All the Obstetricians facility coordinators in the six counties
- All the Nurse-midwives deputy coordinators in the six sites
- The community health strategy teams
- The community administration and the community

Background

- Family planning is an inexpensive and cost-effective intervention but health workforce shortages and restrictive policies limit access.
- Access and coverage for FP can significantly be improved by expanding the provision of contraceptive methods by other health workers through competency based training.
- World Health Organization (WHO) made 48 recommendations on which contraceptives can be delivered safely and effectively by health workers other than doctors. These methods include Post Partum Insertion and removal of IUDs (PPIUD).

Background

- WHO recommendations in “optimizing health worker roles to improve access to key maternal and newborn health interventions through task shifting”, aim to help address critical health workforce shortages that slow down progress towards health related goals.
- Core to every health system is the workforce, there is ample evidence that worker numbers and quality are positively associated with positive maternal and child survival.
- Kenya is one of the 36 countries in Africa that has a critical shortage of healthcare workforce, this has affected the overall quality of healthcare, consequently posing a challenge to achieving universal health coverage.

Introduction

- Glaring imbalances exist: the overall medical doctors' population of 6,675 and estimated 500 Obstetricians and Gynecologists for a population of 45million.
- A Nurse-midwife population of 50,018 makes them the most accessible frontline health worker, providing critical maternal and neonatal services particularly at the primary health care level.
- Recognizing the critical role that nurse-midwives play in the provision of family planning, the Kenya Obstetrical and Gynaecological society in collaboration with the Nursing council of Kenya, embarked on an initiative to institutionalize the provision of PPIUD in six hospitals, through competency based training of nurse-midwives.

Introduction

- While Post Partum FP is an important lifesaving intervention, an analysis of Demographic and Health Surveys data from 27 countries, show that:
 - **95% of women** who are 0–12 months' postpartum **want to avoid a pregnancy in the next 24 months** however,
 - **70% of them are not using contraception**, or leave the health facility without a form of contraception.
 - **50%** of unmet need is amongst women who wished to delay or prevent a future pregnancy.

Objectives

Broad Objective

To institutionalize the provision of immediate post partum of intra uterine devices

Specific objective

- To highlight the contribution of nurse-midwives to the PPIUD program
- To share the success of task sharing

Methodology

- This study was a descriptive retrospective study, part of a broader Programme of work that sought to strengthen the capacity of health professionals in the provision of PPIUD services through continuous learning to enable scalability
- By continuous learning, this means that PPIUD skill is passed on to staffs through short learning sessions. By scalability, this means that all the staffs that did not get the chance to be trained can be reached by the training therefore scaling the PPIUD service to facilities that were not initial targets.

Methodology

- Six teaching and referral hospitals were selected based on their catchment population, infrastructure, number of deliveries and personnel to support continuous learning.
- Following ethical approval, health providers were selected, evaluation was done using pre-post course assessment, training was conducted through didactic sessions and hands on practice using pelvic mama U models in order to achieve PPIUD insertion competency in the classroom before moving to clinical practice.
- Competency in the classroom refers to a learner with the ability to follow the sequentially steps for PPIUD insertion on a model and has mastered the skill and attitude for PPIUD service provision in the classroom.

Methodology

- A health worker and patient module was used for data collection of the Kenya PPIUD project undertaken beginning December 2015 – June 2018. Data were collected electronically using CommCare mobile data platform and transmitted to national office for data management, cleaning and query resolution.
- In the health worker module, anonymized health worker data that included the cadre, highest training, number of insertions and their outcomes were collected.
- Descriptive statistics were undertaken and data is presented stratified by cadre, number of insertions (categorized by proficiency level) and type of delivery.

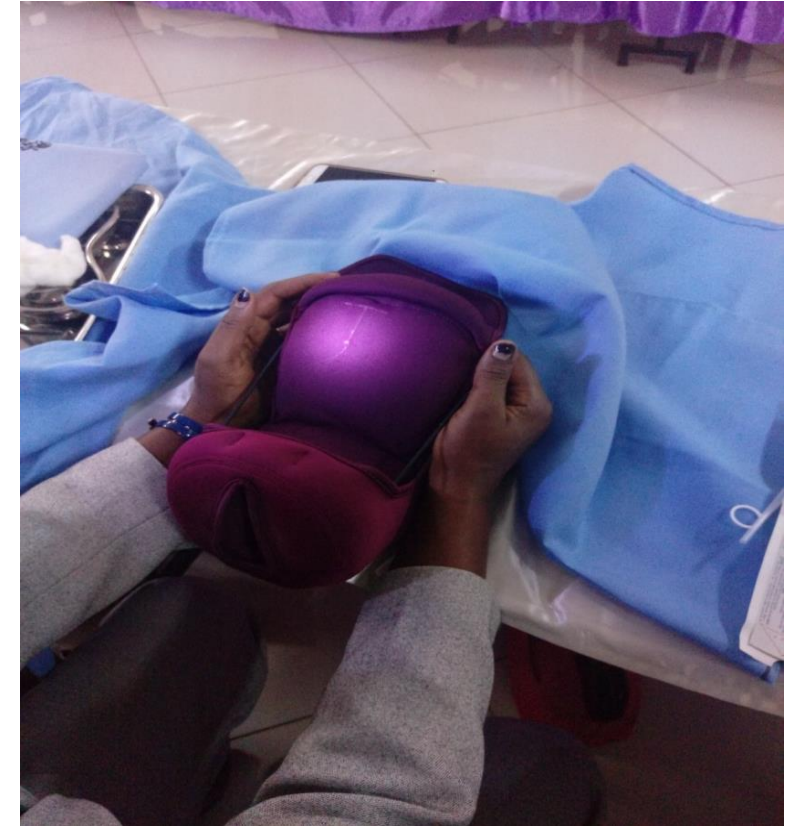
Practicum



Master Trainer Training participant practicing insertion on Mama U



Participants practicing insertion on Mama U at Thika Level 5 Hospital



Sample of a well inserted PPIUD

A community PPIUD outreach by one of the PPIUD trained nurses also a DFC in Thika Level 5

Nurse-Midwives In Kenya are the most **Accessible and Flexible human resource** available to assure universal health coverage.



Achieving competency of the skill

KOGS developed a certification process that would ensure competency of the skill set at the clinical area

- When a PPIUD trainee conducts 5 successful insertions on a model they receive a certificate of participation.
- The PPIUD service provider is issued with a log book that upon insertion of 10 successful PPIUD on a client are certified with a certificate of Proficiency
- The PPIUD provider who is proficient is issued with another logbook that upon completion of 30 successful insertion of PPIUD is recognized with a master provider certificate and is allowed to mentor other practitioners at the clinical area.

Results

- Of the 1277 health workers trained during this period, 77% were nurse-midwives, while other cadres (Medical Officers, Obstetrician's and Gynaecologist and Clinical Officers) accounted for 23%.
- Of the total number trained 39% were rated as experts (having attained more than 30 successful insertions on women) of these 98% of the experts were nurse-midwives constituting a majority of the experts in PPIUD insertions.
- A total of 3373 PPIUD insertions were done out of which 80.6% were performed by nurse-midwives and 19.4% done by others.
- 64.6% % of women came for follow up at 6 weeks.
- The severe infection rate reported stands at 0.0%, removal rate 1%, expulsion rate 1.4% while and there were no reported adverse events.

Discussion

- Majority of the health care providers trained were nurses.
- At the end of the study almost half (46%) of the nurse-midwives had become experts at PPIUD insertion (≥ 30 insertions) with 94% of the insertions following vaginal delivery being inserted by nurses. Conversely, only 3% of the other cadres were experts.
- While these results can be partly explained by the fact that nurse-midwives lead the labor process and are responsible for delivery of most of the health care interventions, these findings illustrate that nurses can appropriately serve as an alternative in the delivery of PPIUD services.

Discussion

- Previous studies on task-sharing from doctors to nurse-midwives and clinical officers have been implemented in provision of HIV, TB and non-communicable diseases with great success and similar strategies should be considered for PPIUD services.
- Task-sharing has been recommended by WHO as one of the approaches for optimizing existing health workforce and has been adopted in Kenya (2017-2030).
- Therefore, with the low doctor: patient ratios observed in LMICs including Kenya, task-sharing of PPIUD service provision with nurse-midwives might help improve coverage for these services as they form the bulk of the health workforce and provide services in the peripheral health facilities.

Conclusions

- Nurse-midwives constitute the most accessible health worker globally to pregnant women in need of critical health services.
- Overall, the data demonstrate that PPIUD is a safe and acceptable method of contraception.
- The study has illustrated that PPIUD services can be effectively delivered by nurses and midwives providing an opportunity for increasing service provision through task-sharing an approach that has been adopted in other countries.

Conclusions

- Task sharing of the PPIUD practice has been effectively demonstrated and can be strengthened through
 - Appropriate competency based training
 - Effective supportive clinical supervision
 - Conducive regulatory environment
 - Programmatic monitoring and evaluation
- Task sharing of PPIUD practice not only provides a critical opportunity for increased access to a key lifesaving intervention for maternal and neonatal survival, by reducing the unmet need for family planning especially during the post-partum period, but is also a critical strategy for the advancement of local, regional and global development goals.



Thank you.



Clinical Outcomes of postpartum TCu380A Intrauterine Contraceptive Device when provided by Midwives in Tanzania

Presented by:

Sebalda Leshabari (RN/M, MPH, PhD)

International Maternity Expo – London

13th & 14th November, 2019

Declaration

- This presentation complies with FIGO's policy for declaration of good standing and conflict of interest disclosure;
- I do not have a financial interest in any product or service related to my presentation;
- Participation at this Conference has been supported by FIGO

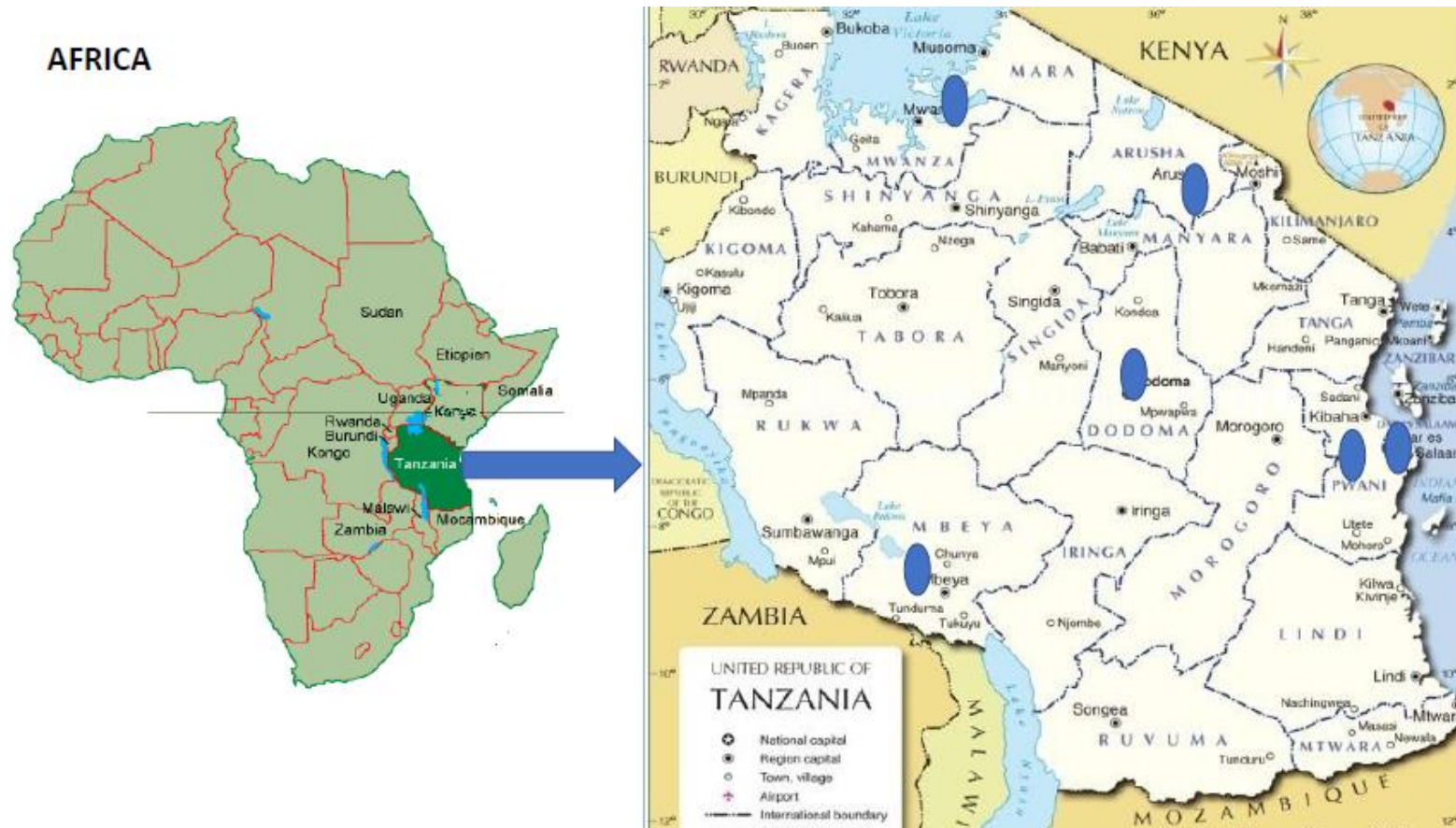
Outline

1. Understand the contribution made by Midwives in provision of PPIUD in Tanzania
2. Establish 6 week rates of Complications of PPIUD when provided by Midwives
3. Compare complication rates with PPIUD provided by experienced Physicians elsewhere

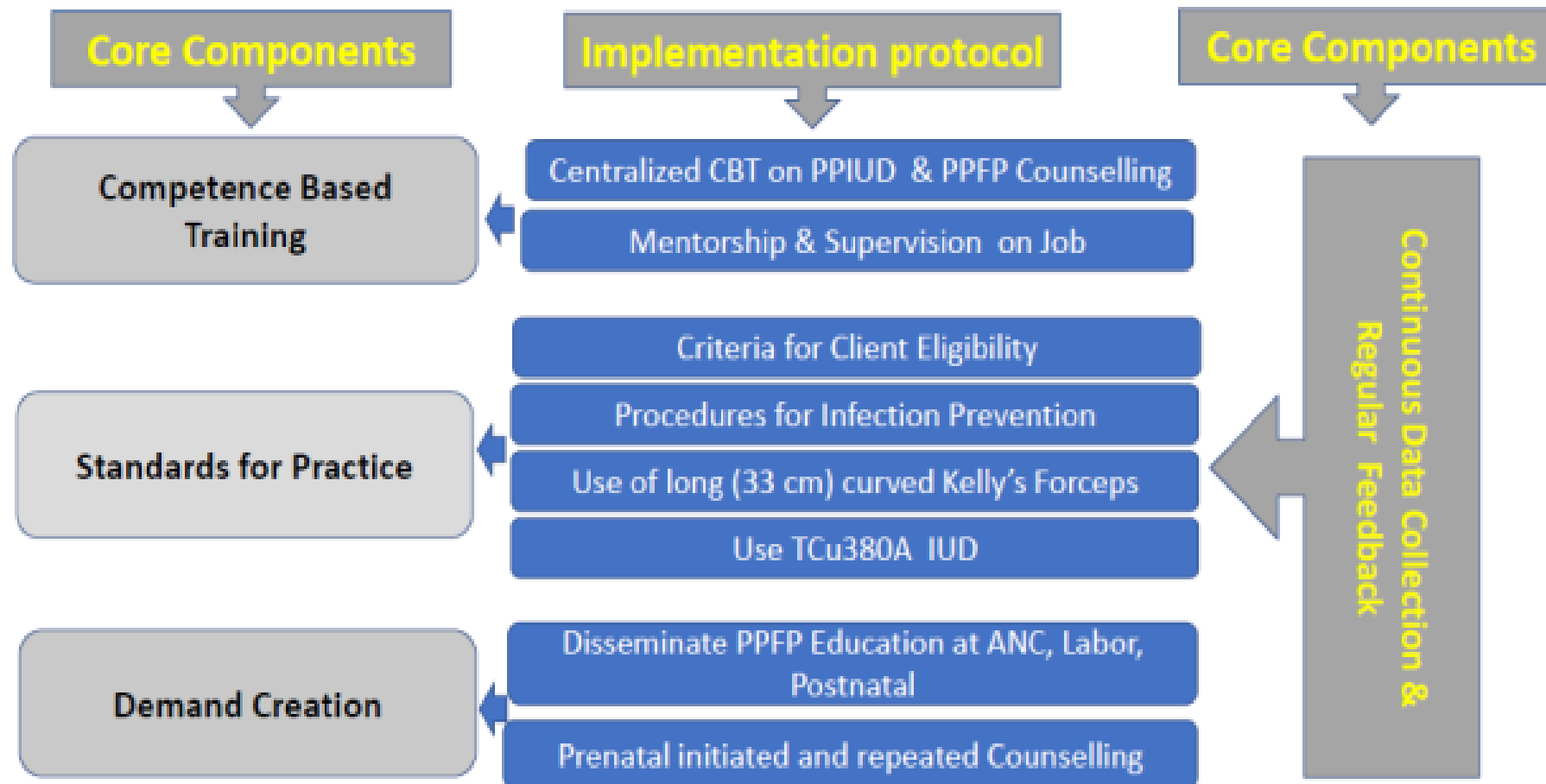
Overview of PPIUD Project in Tanzania

- PPIUD project in Tanzania is part of the FIGO initiative program to institutionalize PPIUD.
- Similar projects were implemented in 5 other countries: Sri-Lanka, India, Kenya, Nepal and Bangladesh
- In Tanzania started in December 2015 with baseline data collection
- Implemented by the National Societies for: Gynecology and Obstetrics (AGOTA) and Midwives (TAMA).

Geographical Distribution of PPIUD project



PPIUD-Implementation Model in Tanzania



Statistics as of June 2019



- 61,712 Delivered women were counselled on PPFP

- 8,452 Had PPIUD inserted

- 2,371 PPIUD clients followed to 6 weeks

- 3,096 HCW trained on Counselling/Insertions



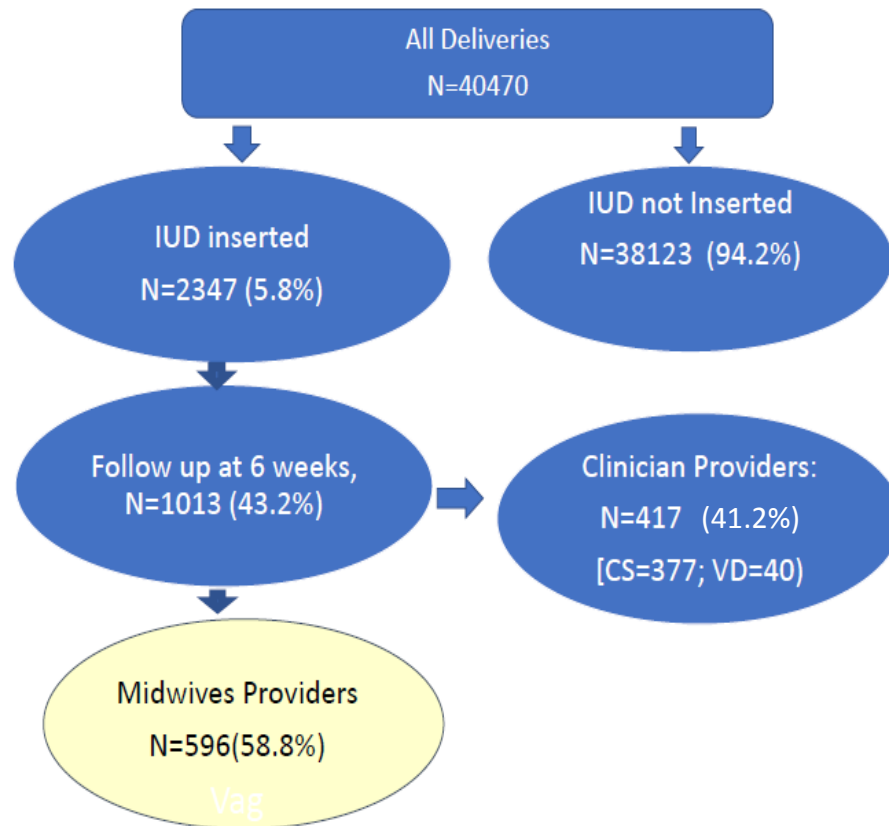
Studies and Publications

- At least 4 papers are published in International Journal
- Ongoing:
 - Lochia study-Paper Submitted
 - One PhD program: 4 sub-studies including follow-up of women for 13 months
 - Economical Evaluation study





Results



- 596 (58.8%) of all Immediate PPIUD Clients who came for follow-up were provided by Midwives by intra-vaginal route
- 43 (7.2%) women had PPIUD related complications by the end of 6th week.
- 16 (2.7%) cases of uterine infection
- 14 (2.3%) IUD expulsions;
- 26 (4.4%) IUD removals; and
- 33 (5.5%) overall method discontinuation

The current Study

- Based on Women who delivered in all 6 hospitals under PPIUD project- 31st December 2016 to 15th October 2017
- Clients who had PPIUD insertions were instructed to turn-up to FP clinics of their choice on the 6th week for follow-up. Contact Mobile numbers were provided in case of need for help.
- All Women who turned up in PPIUD-affiliated Clinics on 6th week and whose insertions were made by Midwives were identified, interviewed and examined.
- Literature on PPIUD complications following TCU380A done by experienced Physicians was searched compared and contrasted

Discussion

Midwives Study	Comparable Studies with Experienced Physicians
IUD Expulsion, N=14 (2.3%)	<ul style="list-style-type: none"> ➤ 9.3% in Turkish study of TCU380A PPIUD insertion by experienced Physicians: Sucak et al., (2015), IUD Expulsion, by 6 week ➤ 20% rate at 12 weeks in USA study of TCU380A by Goldthwaite et al., (2017): 86% expelled within first 6 weeks ➤ 5.3% in India (Hooda et al, 2016)
Uterine Infection, N=16 (2.7%)	<ul style="list-style-type: none"> ➤ 4.5% Multicentre study in India (Sood et al, 2016) ➤ Some small studies report less rates of uterine infection (Hooda et al, 2016) ➤ Abnormal Leukorrhea is reported by 12.3% (Hooda et al, 2016)
Method discontinuation, N=33 (5.5%)	<ul style="list-style-type: none"> ➤ Method discontinuation of TCU380A IUD has been 12.% at 6 weeks (Colwill et al, 2017) ➤ 10.8% in Zambia at 6 months (Blumenthal PD, et al., 2016)
Overall 93% of all PPIUD insertions following VD were by Midwives	

Key Messages

1. Task Sharing of Immediate PPIUD insertion to Midwives in contexts that currently restrict Midwives from performing postpartum intrauterine manipulations is possible and effective
2. The complication rates when Immediate PPIUD is provided by Midwives are comparable to those when PPIUD is provided by experienced Physicians
3. Training Midwives to Provide Immediate PPIUD has more potential to improve access to PPIUD Services than the doctors

Acknowledgements

Investigator: Prof. Projestine Muganyizi

Co-investigators: Grace Kimario, Patrick Ponsian, Anita Makins, Kate Howard & Maya Sethi

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Many Thanks

Ahsante Sana

