

Tishina Ohibi:

Greetings and welcome to today's webinar on Expanding Contraceptive Choice, a webinar series on Family Planning Method: Tubal Ligation. My name is Tishina **Ohibi** and I am a Senior Technical Officer for Community Based Family Planning on the Advancing Partners and Communities Project. Before we begin today's presentation, I'd like to quickly review the Adobe Connect environment and set a few norms for today's webinar.

Today's webinar has three presentations followed by a discussion period, during which our speakers will address your questions. Within the webinar environment, please make use of the Q&A box on the bottom right side of your screen to share your thoughts, note your questions, or ask for help with sound during the presentation. Questions you ask are only visible to you, our presenters, and technical support. If you are experiencing difficulties, our technical support will respond to your questions tidily. We will collect your questions for our speakers and we'll save them for the discussion period.

It is great that we are able to connect people from so many places today but your experience may vary based on your internet connection and computer equipment. I will briefly go over a few troubleshooting steps if you have technology challenges today.

A few troubleshooting tips: if you lose connectivity or cannot hear, close the webinar, reenter the meeting room in a browser other than Google Chrome by clicking on the webinar link provided. Use the Q&A box to ask APC tech for assistance. If the troubleshooting steps are not successful, please rest assured the webinar is being recorded and you will receive an email with a link to the recording following today's event.

Questions that don't get answered during the Q&A session will be compiled after the webinar, shared with presenters, and responses from presenters will be shared with participants.

Today, we'll have two moderators: Trish MacDonald is a Senior FP Reproductive Health Technical Advisor in USAID's Office of Population and Reproductive Health and Jane Wickstrom is a Senior Program Officer for Family Planning at the Bill and Melinda Gates Foundation.

To get us started, I will now turn it over to Trish.

Trish MacDonald:

Hello. I would like to welcome and thank everyone for joining us today. Again, my name is Trish MacDonald and my co-moderator

is Jane Wickstrom, who will be facilitating the Q&A discussion after the presentations. Today's webinar, Tubal Ligation, is organized by the Advancing Partners and Communities, or APC, Project, in collaboration with FP 2020 and the Implementing Best Partners, or IBP, Initiative, as well as USAID's Office of Population and Reproductive Health.

This is a series of webinars that's designed to highlight a range of family planning methods. Each webinar provides details on a single method and today is on tubal ligation.

Our target audience is ministries of health, policy makers, donors, and program managers and I would even add implementers. This series provides information on each of the family planning methods, including how to use them, their effectiveness, how they work, medical eligibility criteria for use, and hot topics specific to each method. It also provides country case studies, as well as information on family planning service delivery channels.

The objectives of the series are to provide technical information and updates on this broad range of methods, engage global audience to discuss emerging trends, highlight programmatic successes and challenges, and answer questions specific to each method.

Voluntarism and informed choice is a high-level of importance and especially important for tubal ligation, which we're discussing today. In programs and in practice, we expect that clients have access to a broad range of contraceptive methods, they receive client-centered counseling on a range of methods, discuss lifestyle, reproductive intentions, and preferences, and have the ability to ask questions.

They freely choose their method without coercion. Clients receive detailed information on the chosen method and they have the opportunity to discuss the method with the provider and to ask questions specific to that method. Providers are also able to offer and counsel clients on a range of methods, even those they do not offer themselves but might be available via other sources, such as through referrals.

Tubal ligation is important for balancing the method mix. We're seeing in the trends that demand for limiting birth is increasing, particularly in sub-Saharan Africa. Right now, the demand for limiting exceeds the demand for spacing in all regions of the world, with the exception of West Africa. Tubal ligation is well-

received by women where it's available with high levels of satisfaction.

Programs should ensure that supply and demand-side barriers to the use of tubal ligation are addressed to meet the needs of women. On the demand side, as we see fertility rates declining, it means longer periods of contracepting for women and couples. It's important to provide positive messaging about tubal ligation, normalizing its discussion, including with young couples, as they are the ones who are finishing their childbearing at younger and younger ages. Emphasizing the benefits of tubal ligation as a non-hormonal method is also very attractive to clients. And we'll be hearing more about overcoming some of these programmatic barriers, as well as some of the successes in the programming.

I would now like to introduce our first speaker, Dr. Kavita Nanda, who is the Director of Medical Research at FHI 360. Kavita?

Kavita Nanda:

Good morning. Good afternoon. Can everybody hear me? So, thank you very much. And Trish and I have the pleasure today of talking to all of you, just giving a brief overview of female sterilization, focusing on tubal ligation. And as Trish mentioned, I'm Director of Medical Research at FHI 360 and thank you to everybody for joining the webinar this morning.

Some of you are already familiar with female sterilization but just as a background, it's a family planning method that provides permanent contraception to women and couples who do not want any more children. And we're going to be focusing on surgical sterilization today. You may have heard of non-surgical sterilization but the methods have either not been proven to work or have had safety issues or are in very, very early development. So, today we're focusing on surgical sterilization, which is often referred to as tubal occlusion, tubal sterilization, tubal ligation, surgical contraception, or minilap.

As Jane mentioned, sterilization, particularly female sterilization, is increasing in popularity and you can see here that, from 1982 to 2011, although rates of male sterilization declined, female sterilization, in terms of numbers of women in millions, increased by a bit.

Generally, tubal ligation is a safe, simple surgical procedure. The incidence of complications is very, very low, around the order of 9-16 per 1,000 procedures. It is considered a permanent method and it's very effective. The failure rate is less than 1 percent, about

0.5 percent after one year, but it does increase slightly over time and that's because, although the tubes are separated and occluded, sometimes they can grow back together and join. And in those cases, about a third of the pregnancies will be ectopic or outside the uterus, usually in the tube, which is now malformed.

Sterilization has quite a few advantages. As I mentioned, it's highly effective. It's very safe. It's very convenient for clients, especially postpartum. It has health benefits that will discuss later. It's cost-effective. And, unless it's done at the time of caesarian delivery or some other surgery, the scar is very small.

In terms of disadvantages, there is a slight chance of surgical complications, the ability to reverse the tubal ligation is limited, and for some procedures, particularly laparoscopy, which I'll mention on another slide, the equipment is expensive and needs maintenance. And experienced personnel are required, although as you'll hear in the next talk, for some procedures, such as mini-laparotomy, you don't need highly skilled surgeons.

Female and male sterilization are very, very cost-effective. And when you look at the cost-effectiveness per couple years of protection, they compare very favorably to long-acting methods and are much more cost-effective than short-acting methods, such as COCs and DMPA.

Sterilization is appropriate for women who: have completed their childbearing; want highly effective permanent contraception; may have difficulty with temporary or short-acting method; and what's important to remember is that there are no medical restrictions for age or for parity, although certain conditions may require special precautions. For example, if a woman has had multiple previous surgeries, then higher skilled surgeons may be needed to do the procedure.

In terms of the mechanism of action, when the tube is either occluded or part of the tube is removed, the sperm is not able to reach the egg.

Tubal ligation has favorable impacts on long-term health. There is a decreased risk of ovarian cancer, as well as a decreased risk of pelvic inflammatory disease, PID.

Importantly, people used to think that there was something called a "post-sterilization syndrome" because some women noticed after tubal ligations that their menses changed. And it was incorrectly thought in the past that this was due to possibly some effect on the

ovarian blood flow caused by ligation of the tube and that this was a physiologic effect. However, studies have shown that any change in menses is more related to either normal aging or to stopping hormonal methods, such as OC or DMPA. And, importantly, tubal ligation does not increase the need for hysterectomies.

It's important to counsel clients that there's no loss of sexual desire after tubal ligation. Eggs don't load up in the body. People still ovulate, menstruation still occurs normally, it just doesn't signal fertility. It's also important to counsel that the tubes cannot be easily united for reversal.

In terms of the surgical approaches, there are several procedures that can be used. One, which we'll focus on a little more in the next slide, is something called mini laparotomy, which can be done either postpartum, post-abortion, or in between pregnancies. And when a mini laparotomy is done, one can either use a technique called tubal ligation and excision – and I'll show you a little bit about these techniques over the next few slides – or can use mechanical devices.

Another approach and one that's commonly used in higher-resource setting is something called laparoscopies, where a little telescope-type device is inserted through a small incision just below the umbilicus and the abdomen is inflated with gas and then surgeons are able to visualize the tubes and then do procedures to interrupt them. And this is usually done by cautery but can be done using mechanical devices as well.

Tubal ligations can also be done at the time of other surgeries, such as caesarian delivery, and that's usually with a bigger incision that's done for that other procedure. And tubal ligations have been done using hysteroscopy, which uses a tube inserted through the cervix to visualize the uterus and visualize the tubal ostia from within. However, the devices which were previously used, Essure and Adiana, are no longer available and were never available in low-resource settings to any great extent.

The procedure that we're going to focus on and that you'll hear a lot about in the next talk is something called mini laparotomy. This is a very simple, very safe, and very effective procedure and it can be done through a very small incision, less than 5 centimeters. It can be used either for postpartum or for interval sterilization. And, importantly, it can be done under local anesthesia. This is a low-cost procedure because of the lack of need for general anesthesia but also it doesn't really need any special – you don't need a

special camera, you don't need special equipment, other than equipment to grasp the tube and to ligate and excise.

And so one of the techniques that's commonly used for mini laparotomy is something called the Pomeroy or Modified Pomeroy procedure, which is a partial salpingectomy, which means a portion of the tube is removed. And it's really easy to do. When I was a faculty in residency programs, this was the first procedure that we teach interns to do, in addition to neonatal circumcision.

And so basically how it works is that a bit of the tube is grasped and tied into a loop, the base is ligated, and then the portion that's looped is excised. And so it's a very easy technique but it's highly effective. And then what happens as the tube heals is that you have two healed ends that separate.

Here are some pictures of some other techniques. The one that's used most commonly in the U.S. through laparoscopy is at the top left and that's using cautery, where a cautery device is used to burn the tube on both sides, and usually multiple burns are done, and then the tube heals and separates.

Tubal banding can also be done, where a portion of the tube is grasped with a special instrument and a rubber band-type device is placed over the tube, on the bottom left. There are also spring-loaded clips that can be metal or plastic that are placed across the tube. That's usually done by laparoscopy but it can be done also during laparotomy or mini laparotomy, although sometimes those devices can be expensive. And as I mentioned, the hysteroscopic procedures are no longer being done to any large extent.

Complications are rare but they can occur, as with any surgical procedure. During surgery, there could be injury to other organs, such as the bladder or the bowel. Particularly with general anesthesia and less with local anesthesia, there could be anesthetic reactions. And there's always the risk of bleeding, either before or after surgery, any time surgery is done. Infection is also a possibility after the surgery. And long-term complications may include adhesions or scar tissue and, as I mentioned before, the risk of ectopic pregnancy.

In terms of reversibility, sterilization is considered permanent. Reanastomosis is possible but it's not widely available. And some women do experience regret after sterilization and this is more common in women under 30. But here, it's important to mention that some women may regret if they don't get to have the

sterilization procedure they wanted.

When I was working in Pennsylvania as a resident, an intern and resident, and I believe this policy still exists, Medicaid mandated a 30-day waiting period before a woman could have tubal ligation. And so many times we would have people come in who either had had limited antenatal care or hadn't signed their tubal papers in advance and, unfortunately, these women were not able to get the tubal ligation they wanted because they didn't have the required paper 30 days in advance. And then we would see them, unfortunately, for their next unintended pregnancy. So, regret goes both ways.

In terms of counseling, as Trish mentioned, informed choice is very important. Providers should: discuss the woman's reproductive desires; discuss alternatives to sterilization, including LARC method; and give the woman her preferred method, if possible, or refer her if that method is not available. The decision to end fertility should be carefully discussed so that the woman or the couple understands their decision. And the risks and benefits of surgery, including the risk of ectopic pregnancy, should be discussed.

If there are doubts, then delay should be recommended but it's important to remember that this is an informed choice that the woman or couple is making. And so things like the Medicaid 30-day delay really put barriers in front of women and couples who want to make this type of decision. And after the choice is made, informed consent, of course, is an important part of the pre-procedure.

And that is the end of my talk so I wanted to thank you for listening and I will see if there are any questions. I see somebody had asked, "How do I ask a question?"

Trish MacDonald: Thank you, Kavita. And for those of you who do have questions, in the lower right-hand side of your screen, there's a box that says "Q&A." You can go there and type in your question. So, Theresa, just type it into the box, the same box that you wrote your previous question into. And we'll have the discussion session after all three of the presenters have presented.

Our next speaker is Dr. Mark Barone. He's a Senior Scientist at the Center for Biomedical Research at the Population Council. Mark?

Mark Barone: Thank you very much, Trish, and thank you, Kavita, for the

overview of female sterilization. Good morning, afternoon, and evening to everybody. Thank you for taking your time to join in the webinar today.

So, I am going to talk about four things. I want to share a little bit about unmet need for contraception, with a focus on women who want to limit future birth. And then I'm going to talk about task shifting generally, as well as some evidence to support task shifting of female sterilization. And then I'm going to finish with some thoughts on what is necessary to move forward with task shifting female sterilization.

Despite the impressive gains in use of modern contraception around the world over the past 50 years, there is still large unmet need for family planning, with an estimated 214 million women in developing countries not using a modern contraceptive method despite wanting to delay future birth or not have any children at all.

Unmet need for family planning is higher in sub-Saharan Africa. And, additionally, the number of women wanting to limit future childbearing in this region has been steadily rising. These are women who do not want to have any more children, as opposed to women who want more children in the future but just not right now. An analysis of DHS data from 18 countries in sub-Saharan Africa, conducted by their American colleagues, noted that, in 2012, there were an estimated 7.8 million women with an unmet need specifically for limiting future birth.

In addition to that unmet need for family planning among those wanting to limit future birth, there are a large number of women who want to stop childbearing who are using less effective and more inconvenient short-acting methods. And as Kavita just mentioned, methods that are not as cost-effective instead of more effective methods, such as female sterilization.

This chart is taken from the Van Lith paper I mentioned in the previous slide. It includes data only from women who want to limit future birth. If you focus on the green part of the bars, which represent short-acting methods, you can see that in most of the countries included in their analysis, a majority of women are using short-acting methods despite wanting to stop having children. Additionally, the purple bars, which are traditional methods, are common at least in some of the countries. We could hypothesize that many of these women would be interested in female sterilization since they do not want to have any more children.

Now, Kavita mentioned regret and I'm just going to say something about it as well. As she noted, regret is generally low among users of female sterilization. And interestingly, although we often think of regret in terms of women who have had a female sterilization, as Kavita mentioned, there's another way to look at the issue, which is regret among women who planned to have a female sterilization and then didn't. While there are many reasons that women who plan to have one don't, in the end, obtain sterilization, one reason is lack of availability and access to the services.

Not many studies have explored this issue of unfulfilled plans but here are some data, which I know are quite old but, in any case, in one study, among nearly 2,000 low-income women in the U.S., results showed that while 6 percent of women who had a sterilization later regretted, an astonishing 47 percent of those who wanted one that didn't get one experienced regret.

Access to female sterilization is clearly an issue in resource-limited settings and one way to increase access is to expand the types of providers that are allowed to conduct the procedures. Task shifting is the delegation of some tasks to less specialized health workers, expanding the scope of practice of the lower level staff.

Now, I know that there are debates about the terms to use and the exact meaning of these terms and I don't want to get into that debate right now. I just want it to be clear that, for the purposes of today's presentation, I'm using the term task shifting and, in our case, to mean having sterilization, female sterilization, performed by non-specialized health workers, in particular, non-physician clinician.

This slide lists some potential benefits of task shifting. The idea of task shifting arose with the acceptance of the realization that there are inadequate numbers of physicians, that physicians are unevenly distributed, more in urban than rural settings, and that there are difficulties recruiting and retaining physicians in rural and underserved areas. All of these limit access to health services.

Around the world, access to family planning, other reproductive health, and HIV-related services, as well as many other types of health services have been increased through safe provision of these services by a wide range of non-physicians.

In 2012, WHO released guidelines for optimizing health workers roles to improve access to maternal and newborn health interventions through task shifting. I extracted the information on

this slide from a summary brief published by WHO last year.

You can see on the left-hand side, it is recommended that nurses and midwives conduct tubal ligation only in the context of rigorous research. Those are the yellow circles. Tubal ligation was considered by WHO within the scope of practice for associate and advanced associate clinicians. Although you can see by the note that the evidence to support this recommendation was not reviewed as part of the guidelines process.

This table comes from 2012 WHO guidelines I mentioned and it gives some detailed information about advanced level associate clinicians and associate clinicians. The advanced level ones are non-physicians who generally have 4-5 years postsecondary education. An associate clinician, on the other hand, is a non-physician with less training, generally 3-4 years postsecondary education. While the advanced associate clinicians typically perform a variety of surgeries, associate clinicians generally would only perform minor surgery, if any.

You can see in the last column that there are many different names used to describe the different types of providers and sometimes the same name might be used in different countries to describe people with different levels of qualifications. And clinical officer is an example of that. So you can see in Malawi, it's used to describe somebody with more training, as opposed to the other countries listed in the associate clinician row. These inconsistencies can cause difficulty interpreting the evidence for task shifting and one has to know the qualifications of the types of non-clinician providers participating in the study.

As mentioned in the slide with the checkmarks, WHO did not assess the evidence around provision of minilap by the associate and advanced associate clinicians when they developed those guidelines. And after those guidelines were released, two systematic reviews looked at the issues. The two reviews that are shown here on the slide.

These studies were mostly conducted in the '70s and early '80s and were mostly in hospital settings and retrospective record reviews or prospective studies where all procedures were conducted by non-physicians. The evidence nonetheless suggested that female sterilization could be performed by a wide variety of non-physicians but the authors of both recommended that well-designed clinical trials of adequate sample size are urgently needed to provide further evidence on this issue.

I want to highlight three more recent studies from sub-Saharan Africa which have looked at task shifting, specifically occlusion by mini laparotomy conducted by non-physicians. Two of the studies, as you can see here on the slide, involved advanced associate clinicians and the third, the one in Uganda, providers were associate clinicians. All three of them were small and none of them were randomized. However, the results from all three suggest that the non-physicians could perform minilap safely.

The last piece of evidence on task shifting I would like to mention today are the results of a study I was involved in in Tanzania while I was working at EngenderHealth. It was published recently in *Global Health: Science and Practice*. Working with the Tanzanian Minister of Health, we conducted a randomized study to explore if tubular occlusion by minilap provided by clinical officers was as safe as those provided by assistant medical officers.

So, in Tanzania, a clinical officer had three years of specialized training and an assistant medical officer, an AMO, is a CO who has at least three years of clinical experience and then an additional two years of training. AMOs are allowed to provide minilap under government regulations but COs are not.

In the study, we randomized almost 2,000 women seeking minilap at seven sites in Tanzania to have their procedure done either by a CO or an AMO. And the results showed that tubal occlusion could be safely and effectively conducted by minilap by trained COs with no evidence of increased risk of adverse events, no problems with performance of the procedure, or negative effects/unsatisfaction among women compared to when the procedure was conducted by an AMO.

These results from a large, randomized study provide solid empirical evidence to support changing international guidelines and country-level regulations to allow task shifting minilap to properly trained and supported clinical officers and similar non-physicians.

In order to successfully introduce and scale up female sterilization to associate clinicians like clinical officers, it will be necessary to revise policies, regulations, and guidelines, establish training programs and career protocols for referral – for example, with difficult cases or complications – and to develop systems for ongoing support to these providers.

And then there are an assortment of interesting issues to look at after task shifting is implemented. Things like what's the impact on quality of care? On uptake of female sterilization? On providers ability to carry out their other duties?

And I'd like to just mention that, recently, WHO recommended additional research on safety and effectiveness of nurses and midwives delivering female sterilization to further increase access.

So, I'd like to close by just noting that expanding the health workforce will be critical to improving health, strengthening health systems, and making progress towards the family planning related SDGs, as well as the FP 2020 commitment. Task shifting can help address the human resource for health shortages, helping women to meet their reproductive intention. And, finally, I'd just like to note that although today's topic is female sterilization, the concepts and ideas around task shifting apply to all of the family planning methods that have been discussed in the previous webinars in this series.

Thank you very much for your time.

Trish MacDonald: Thank you, Mark, for a very interesting presentation. I'd like to ask everybody, if you have questions for Kavita or Mark, to please type them into the Q&A box and we'll have a fuller discussion of all the questions following our last presentation, which is by Dr. Ominde Japhet Achola. He's a Senior Clinical Advisor at EngenderHealth. Dr. Achola?

Dr. Achola: Thank you very much, Trish. My presentation will focus on female sterilization programming in the East Africa region and I'd like to thank everybody for listening. I will focus on three broad areas: increasing awareness and demand, the enabling environment, and supply side. And then one or two on a regional meeting that we held in 2016 in the region to identify priorities on permanent method delivery across the region.

So, as a way of context, I think my colleagues have gone through the aspect of the need for female sterilization and on this graph – I'm sorry, it might be very small print – but I just want to mention here that the need to limit in 11 countries ranges between 7-14 percent and the need to space ranges from 8-18 percent. Again, these are all data from FP 2020, PMA 2020, and the DHS data. If you look at contraceptive prevalence of the permanent female sterilization, it ranges from 0 percent in about three countries to 18 percent in Malawi. So that is how it looks like.

And who are these women that are accepting female sterilization across the East African region. The majority of them are over the age of 35 years. They have three and above living children. There is not much difference in where they reside. Both in the urban setting, we have 0.3-10 percent across the different studies across the countries, and 0.4-11 percent in the rural areas. Education and the wealth quintile has not changed.

But I just want to mention that our interventions to improve access to family planning is just reaching those above the poverty line. Those below the poverty line, according to the Reproductive Health Supplies Coalition report, we are only reaching 16 percent and, therefore, we still have a lot of work to do to reach those below the poverty line.

Now, the first area is on increasing access, awareness, and demand. And this is a commitment that is being met and we can see it in the region, as reflected by national program putting in place medium-term plans or strategies, showing how to increase awareness and demand, which should be linked also to an increase in quality of services and access. Malawi has also put forth a request. This was as late as early this year. We have not addressed that but they're also looking at a medium-term approach to increase access.

Now, the services that we are talking about must be affordable. Unfortunately, if you look at the right side of the slide, I'm just showing three countries, but FP users who have been seen at their last visits, all women, showed that they were paying between – 20-45 percent had to make some payment for the services. Now, for female sterilization, in some countries, it goes as high as \$100.00 equivalent in the public sector. This is a barrier and it needs to be addressed.

Insurance carriers, most in the East African region do not cover family planning. We have also voucher schemes that have been introduced in countries, in selected countries, and those do cover family planning or make provision for family planning, including female sterilization. However, they are still of small scale and they have not gone to scale so that they can maximize the benefits of such voucher scheme.

The other area that has been a focus for increasing demand and awareness is addressing myths and misconceptions that arise in the area of permanent methods acceptance. That is done by provider training and development of materials, ensuring that motivators

have the right information to dispel such rumors and misconceptions.

You did hear from the moderator about focusing on young couples and individuals who complete their family or achieve their reproductive intentions quite early and over 25 years, there is still need to prevent pregnancy. They also had to reach people, people with disability. We have not been reaching them quite well. You also have champions who have satisfied clients and have been very successful in several countries – Uganda, Tanzania, Kenya, Ethiopia.

And then community workers and mobilizers are usually the common way of reaching clients and informing them about this method. This is done mostly by word of mouth. They also do a bit of counseling and, of course, providing the information. Mass media has also been used successfully. Use of other means, like posters, are used to announce when such services will be available. Social media is another new tool that is now coming on board. However, we don't have many programs in our East African region that have harnessed this resource. What they are being used right now for are mainly to – for aftercare, follow-up care after clients have received procedures. This is mainly through the mobile phone. But, definitely, this is an opportunity because the young population and the young individuals have used this and are communicating quite a lot in this method. Mobile penetration is also increasing markedly in most of our countries in the region.

The other area that is increasingly becoming an important area to address, especially the programming, is the gender factor. It is now evident that gender norms influence the extent of which individuals and couples can access and receive family planning and have satisfaction in using those methods. And, therefore, under the Respond program – or project, sorry – EngenderHealth successfully tested several packages on couple counseling and those are now being rolled out in selected projects. However, again, this is not full-scale and we don't have it where it is a program-wide kind of intervention or approach.

What we want more information here is most projects are adopting a gender lens to look at even the messages that are going out and the organizational services to ensure that they do not promote negative or encourage negative – and maybe in the unlikely event, also, bring in harmful approaches.

Now, the issue, again, here which we need also to take care of is

spousal consent. We know when we encourage couples, there's a tendency of also wanting that the couple sign together. It is not mandatory for the male gender in the partnership to sign for that. The woman still has independence and she can sign for that procedure and have it when she wants it but it's not mandatory. Therefore, projects and programs need to make sure that that does not come back again. Because it used to be there in the past and it was a hindrance and a barrier to access.

The enabling environment is another important aspect which the ministry should take leadership. In the East African region, laws are not a major barrier, except in Sudan where we know services for female sterilization, by law, are supposed to be only offered for medical reasons or therapeutic reasons. The other countries, there's no such law.

Countries have also put in place strategies to give clear direction of how they want to scale up and increase access. Kenya had one. It has been long overdue for revision. Ethiopia is currently in the process of developing its strategies. There are costed implementation plans, which almost have mirrored the permanent medical strategy but these are brought up for family planning in a much broader context and, therefore, therein you have aspects which focus on female sterilization.

Other ingredients that are important for enabling environment is the national guidelines to articulate how the services, where they should be offered, and what are the parameters for ensuring safety and quality. Standards and procedure manuals should also be developed.

In 2014, we had a meeting in Nairobi here. It was a global meeting and we were looking for consensus on the approaches. As you heard from the first speaker, there are so very many approaches and techniques that can be used. So we came together to see which ones are best suited for our low-resource settings. And minilap was identified. We agreed on the pain management approach and the procedures and, of course, when we are technical, we have some areas of controversy. Those were also identified and we agreed on how to address them.

The importance of champions, critical when you are scaling up or you are funding services to maintain the – to sustain the efforts and ensure that commitments continue through the process of scale-up and expansion.

The services are currently being offered across all the countries through the public sector, faith-based organizations, and the private sector. And in terms of client load, I think it's just in the same order that I have mentioned them.

The service delivery modalities, the standard ones that we use, the routine and the mobile outreaches, mobile outreaches are high impact and they always yield results. There are several modalities. The public sector doing them within their own facilities but we also have where the private sector comes to the public sector in a private-public partnership. We have also seen successes using these mobile outreaches for the so-called rapid responses, which are initiated by the public sector and female sterilization is usually one of the ingredients there.

Unlike the other methods, we require a minimum standard for the procedure area. And, therefore, in programs which need to initiate this, they should make provisions for innovation and ensuring that they meet the minimum standards where such services will be offered. Outreaches also need to assess site services and ensure that the minimum standards are maintained for safe results.

The method requires team effort and, therefore, any programming, at least to 3-4 team members, medical professionals, are required to offer one minilap procedure. Lack of skilled providers is the most common barrier to access and you heard about task shifting. It has worked very well and has been successful in Malawi, where we are now seeing 18 percent uptake according to FP 2020. Other areas where it has been accepted is Mozambique, Ethiopia, Tanzania. Kenya has a policy but we are still discussing. And in Uganda, they are still working on that policy.

Provider bias is another aspect that needs to be taken care of during the introduction and the scale-up of female sterilization. And, of course, when it's being offered routinely. We have a two-week training for skills building. It's mostly in-service. It's not harmonized in most countries. We are seeing Centers of Excellence now being developed in Ethiopia to address other aspects of this training and to ensure that they introduce some sustainable approaches, like OJT and mentorship in the localities within their areas of jurisdiction. These are mainly training institutions.

The other aspect is that pre-service training, especially as we move to task shifting, is an important area that we need to focus on. Skills to provide female sterilization were initially a requirement for registration in countries like Kenya here. Now it is no longer a

requirement. But as we move to task shifting, we need to think of those avenues to ensure that our providers have the skills. In any case, there are seniors who don't always have those skills and be even better off so that they can provide the supervision and support needed in the event of problems.

And now that brings me to supervision and mentorship again. Here, it's an important aspect of programming. Again, to ensure that you provide the coaching and mentoring required, ensure reports for complications are being used to improve quality of services, and the counseling is quality counseling. Job aides are available and other tools to offer services, infection prevention practices are there, and commodities are there to ensure a wide range of metals are being offered.

On the right, we are looking at what it is on the ground in the East African region. I just picked a sample of countries. Just about 70 percent of the countries – sorry, 7 percent of the facilities are visited and, therefore, the providers were saying they had received a visit in the last six month from their senior. The rural facilities, like health centers, seem to get more visits than the hospitals.

Then the other aspect is quality of counseling. You've heard about voluntarism and informed consent. You've also heard about regret, which is low. The approaches that we adopted are the REDI, balanced counseling, and GATHER. We also have task shifting for counseling. This is the counseling for female sterilization. The verification and the signing of the informed consent should be done by a provider. However, the others can be done by a non-medical provider. And, of course, the counseling, as has been mentioned, focuses on choice, side effects, aftercare, etc.

I just put here post-abortion care, just because we usually have a caution for such clients just in case they have not well-considered that the decision to have a permanent method, and bearing in mind the situation they are in, they might accept the method and later regret. However, if it is a well-considered decision, they should receive the services.

How we are doing in the East African region is on the right side. You can see, for current users who were informed about other methods, it's less than 60 percent. Clients who were informed about side effects, it's even lower, less than – below 60 percent in some countries. But clients who were informed where to go seemed to be slightly better but not 100 percent. So, there's still room to improve in ensuring quality of counseling.

Method mix has been discussed earlier and I won't elaborate it but to just mention that female sterilization is an important ingredient. The commitment is there in government, the policies at all levels, however, we still have a skewed method mix in reality. We have countries where a method, maybe like injectables, is being accepted by almost 50 percent of the clients and, therefore, that is an area that needs further improvement to ensure method mix.

Lastly, I just want to mention about mentioning that we have in September – in August, sorry – 2016, in Malawi, where we brought together ministry of health officials, CAs, and development partners, to look at what our priorities are vis a vis permanent methods, increasing access to those methods, and the quality of those methods. And some of the priorities that I'm going to mention were listed from the regional perspective.

One is the need for harmonization of training approaches and standardization of our skills as trainers, etc. Second is provider BCC approaches and packages are missing and, therefore, there's a need to have such packages available, particularly for the permanent methods. Guidelines for minimum infrastructure and procedure area requirements. Given that we are doing a lot of outreaches and yielding a lot of results, we want to know what is best to ensure quality and safety. The reporting of complications and side effects and how they fit into the HMIS system but, more importantly, how to use those at the point of connection and the other different levels.

And then we're looking also for best practices in engaging community health workers to increase access to female sterilization and permanent male sterilization and also how to work with the religious leaders more effectively. Of the submitting countries that were represented, about five or six came up with action plans and they are implementing them as we speak. Thank you very much.

Trish MacDonald: Thank you, Dr. Achola, and now I'll turn it over to Jane for the Q&A.

Jane Wickstrom: Thanks, everyone. These are wonderful presentations. And now we have a small amount of time for discussion. So, again, if you want to ask a question, you can put it in the box. We have one for Dr. Achola. Beyond myths and misconceptions, misperceptions, what types of positive messaging are included in the Kenya communication strategy to interest potential clients?

Dr. Achola: Thank you. There are several messages that are included. Some of the misconceptions are that when they do sterilization, you will become impotent. And I think the message there is that sterilization does not impact on your libido and they still remain – they can continue having their sexual activities as they had before. We also have champions giving those messages.

The other one is that once you are sterilized, it's not like your womb has been turned inside out so you will have a lot of problems throughout. You won't be able to work properly and you will always be in pain. And the message there that is usually provided is they show that – the clients are shown a diagram of how the procedure is done and it is the tubes, which are outside the uterus, and, therefore, those are the ones that are ligated and a small bit of it is removed. But that does not turn anything upside down and they still continue to experience their menses and they also can work. It's just a short period they have to take care. And there are several others.

Jane Wickstrom: Thank you very much. Appreciate that. We have a question for Kavita. How has tubal ligation decreased ovarian cancer?

Kavita Nanda: Hello. Can everybody hear me? Can you hear me? Can you hear me?

Dr. Achola: Yes.

Kavita Nanda: Sorry. So, ovarian cancer has different histologic types but some of the types are believed to originate from the tube. And so it's believed that when the tube is ligated, either the physical obstruction of the passage of these cells towards the ovaries is what leads to the decrease or disrupting the blood supply to the tube and disrupting the tubal epithelium itself may lead to this decreased risk. And that's for a particular type called serous, which is one of the more common types of ovarian cancer, believed to come from the tubes.

Jane Wickstrom: Thank you very much. And we have a question for Mark. Again, back on the demand side which is so important, how is demand creation carried out when there is task sharing? Is it part of the skill set for task sharing? Is it included in systematic reviews or the Tanzania study you did?

Mark Barone: Thank you, Jane and whoever asked the question. I don't recall that demand creation is included in those systematic reviews and it

really wasn't part of our study, per se. There isn't anything different, really, that needs to be done in terms of demand creation, depending on the provider type, I don't think. I think part of the training that the providers would receive is so that they could – clearly, so they can counsel women and then they could talk to women about the availability of services.

But I don't think that there is a need, really, to alter whatever the ongoing demand creation activities are in any particular setting. It's just that there are more services available and more providers to provide those services.

Jane Wickstrom: Thank you so much. One more quick one, Mark, while I have you on the line. In Uganda, clinical officers were trained to provide permanent methods, vasectomies, tubal ligations. However, since the conclusion of the study, they reported feeling insecure to provide these services in case an accident happened during the procedure. There was no policy in place to protect them. Has this been your experience in other countries? Are there key lessons or advice you can share on how to overcome this barrier?

Mark Barone: So, thanks for that question also. This relates to those policy system and program level changes that need to be made in order for task shifting to be successful. It's necessary to revise the policies and the regulations and the guidelines, both within the government, like in the ministry of health, but also within the professional bodies that oversee any particular type of provider so that this – in our case, tubal ligation – is included in their scope of practice so that they are, in fact, protected.

So, in Tanzania, where we did the study, the government is still debating the results and deciding exactly how they will revise the guidelines. But I think it's a critical issue and it needs to be addressed in order for the success of task shifting.

Jane Wickstrom: Thank you so much. And I'd like to thank all the participants again for giving their time and expertise today. In the next few days, you will be receiving an email with a link to today's recording. Before we close the room, I wanted to encourage you to take a moment to fill out the poll questions below as the feedback helps us improve future webinars. Thanks, everyone, again and have a great day.

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Duration: 64 minutes