ASSESSMENT OF FAMILY PLANNING AND IMMUNIZATION SERVICE INTEGRATION IN MALAWI

Dowa and Ntchisi districts

SUBMITTED TO:

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EXECUTIVE SUMMARY

In Malawi, family planning and immunization services have been provided largely in parallel with different service schedules at health facilities and by different providers. In order to manage client flow, health centers often have had separate days scheduled when FP services and immunization services are provided. At the policy level, services are integrated as part of the Essential Health Package, however, in practice this integration is not easily achieved and service providers require assistance in actively linking seemingly disparate services. MCSP has supported systematic and proactive integration of family planning and immunization services at health facilities and through the outreach platform in Dowa and Ntchisi districts.

A qualitative study was conducted to assess how integration of family planning (FP) and immunization services affects service provision, utilization and perceptions of quality at Maternal and Child Survival Program (MCSP) sites in Dowa and Ntchisi districts in Malawi.

The study included in-depth interviews with health workers and program managers and focus group discussions with mothers of under one children who accepted family planning and vaccination referrals but also those who refused family planning referrals. The findings of the study show that there are substantial perceived benefits associated with service integration ranging from timesavings on both provider and client to improving overall health indicators among women and young children. Most respondents felt that they can now access the two services in one day at the same place compared to the past before introduction of integrated services where clients had to visit the health facility twice to receive the two services. On the side of health workers, they noted that integration has tremendously reduced the workload as they now are able to provide the two services at the same time.

Lack of adequate resources such as staff, commodities and transportation are thought to pose difficulties in the effective implementation of the integrated approach. The program should consider addressing the cited challenges for effective continuation and scale up.

INTRODUCTION

Immunization and family planning services are important components of primary health care. Most women in the extended postpartum period want to delay or avoid future pregnancies but many are not using a modern contraceptive method. In fact, an analysis of data from 21 countries revealed that 61% of all postpartum women have an unmet need for contraception[1]. Family planning allows couples to have the number of children they desire and to achieve healthy timing and spacing of pregnancies in turn improving maternal and child health. Closely spaced pregnancies can pose serious health risks to mothers and their children[2]. Pregnancies spaced less than 18 to 24 months apart have been associated with an increased risk of preterm birth; low birth weight; fetal, early neonatal, and infant death; and adverse maternal health outcomes[3]. Malawi's overall modern contraceptive prevalence rate is 58%[4], however it is anticipated that contraceptive use among women in the extended postpartum period is substantially lower.

Infant immunizations, on the other hand, are one of the most well-used health services globally. The vaccination and primary health care intervention schedule in the first year of an infant's life calls for multiple health care contacts. Higher than the modern contraceptive prevalence, Malawi's nationwide DPT3 vaccination coverage rate is 88%[5]. From a public health perspective, it is crucial to take advantage of every contact with pregnant and postpartum women to offer them family planning counseling and services. Ensuring that family planning counseling and services are linked to infant vaccination contacts through well-managed primary health care services has the potential to reach mothers with family planning and immunization information and services at a critical time—the 12 months following birth. Family planning and immunization integration can refer to either "combined service provision," when both services are offered on the same day and at the same location, or "single service provision plus referral," when either family planning or immunization services are provided along with education, screening, or referrals for the other service. Service integration takes place through *routine* immunization contacts rather than during immunization campaigns, which are sometimes not recommended as platforms for integrated services.

In Malawi, FP and immunization services have been provided largely in parallel with different service schedules at health facilities and by different providers. In order to

[1] Moore et al, 2015
[2] WHO, 2007
[3] Conde-Agudelo et al., 2012
[4] 2015-16 Malawi Demographic and Health Survey
[5] http://apps.who.int/immunization_monitoring/globalsummary/estimates?c=MWI

manage client flow, health centers often have had separate days scheduled when FP services and immunization services are provided. At the policy level, services are integrated as part of the Essential Health Package, however, in practice this integration is not easily achieved and service providers require assistance in actively linking seemingly disparate services.

PROBLEM STATEMENT/JUSTIFICATION

Integration efforts in Malawi supported by MCSP build on a successful pilot initiative implemented by the Maternal and Child Health Integrated Program (MCHIP) in collaboration with the government of Liberia. At 10 pilot sites in Liberia, vaccinators offered referrals for same-day family planning services at the completion of each immunization visit, resulting in an increase in family planning uptake. MCSP has since worked with the Ministry of Health to expand efforts around integration of services to new sites in Liberia.

As noted in the HIP brief**Error! Bookmark not defined.**, more evidence is needed before this can be classified as a "proven practice." Specific areas that require further exploration include: how different integrated models impact both family planning and immunization and associated infant and child health outcomes; how integrated service delivery affects quality of both family planning and immunization service provision; and how the success or failure of integrated FP and immunization service delivery is affected by contextual factors within the service setting and community. This study aims to address aspects of these existing research gaps and contribute to global knowledge on family planning and immunization integration.

Main objective

This study aimed to assess the feasibility and outcomes associated with integrating family planning (FP) and immunization services at Maternal and Child Survival Program (MCSP)-supported health facilities and outreach sites in Dowa and Ntchisi districts in Malawi.

Specific objectives

1. To assess how integration affects both family planning and immunization service provision and utilization in Dowa and Ntchisi districts;
2. To assess how integrated service delivery affects perceptions of family planning and immunization service quality;

3. To assess how integration is affected by contextual factors within the service setting and community.

METHODOLOGY

Study design

This was a mixed methods study conducted in two districts in Malawi, Dowa and Ntchisi. The qualitative component explored key themes such as general perceptions regarding the integration initiative; most significant changes observed since integration of services; implementation challenges and recommendations for future efforts.

Secondary data analyses were conducted to assess the effects of family planning and immunization service integration on service provision/utilization rates, and to provide context for interpretation of post-integration qualitative assessment findings. Aggregate monthly service statistics were extracted from the Malawi Health Management Information System (HMIS) and the project's supplementary routine data collection tools (FP/immunization referral forms); and used to analyze changes in service provision/utilization trends before and after integration of family planning and immunization services. Supervision visits were conducted monthly at intervention sites during the implementation period. Supportive supervision reports, prepared for program purposes, include information extracted from health facility or provider records related to intra-facility referrals and notes from discussions with service providers and facility supervisors, observations, and client exit interviews. Together, this information was also used to provide context for interpretation of post-integration qualitative assessment findings.

Study Sites

The qualitative study was conducted at three health centers and 1 hospital in each district, and one outreach site under each of the health facilities that were selected where FP/immunization integration activities are taking place. Facilities and their outreach sites / catchment areas were selected based on hospital recommendations and outreach schedules.

Participants

Participants included service providers and their supervisors, as well as mothers with infants under 1 year who accessed FP or immunization services at study sites (health facilities and outreach) during the study period. Two FGDs were also conducted with fathers with infants under 1 year in the communities around the health facilities. At study sites, mothers who accepted same day FP and immunization services and mothers who did not accept same day FP and immunization services were included. In two study sites, fathers of children <1 year of age were included. At facilities with

more than 1 family planning provider and HSAs, those who participated in the FP/immunization integration training were prioritized for participation in the study.

Data Collection

The qualitative component included in-depth interviews with family planning providers, vaccinators, and health facility management, and focus group discussions with mothers and fathers of children under one year of age. Prior to data collection, research assistants were trained in qualitative interviewing, informed consenting as well as working in teams. We pre-tested data collection in two health facilities that were not part of the study but also implementing integrated services in Ntchisi district. The pre-testing informed revision of question guides and logistical processes for data collection. We audio-recorded the interviews and FGDs as well as took hard copy notes during the interviews. We transcribed the interviews verbatim.

In addition, health service statistics and process-related data were collected from facilities and associated outreach sessions selected for integration support to assess trends in service utilization before and after initiation of integrated services.

Qualitative data analysis

We used inductive approach to data analysis where we used the actual data itself to derive the structure of analysis. Using NVIVO software, we identified themes and categories that emerged from the data by discovering themes in the interview transcripts and attempted to verify, confirm and qualify them by searching through the data and repeating the process to identify further themes and categories.

Ethics

This study was reviewed and approved by the National Health Sciences Research committee in Malawi and the Johns Hopkins IRB in the United States of America. We notified all relevant authorities in the districts about the study. Written informed consent was sought from all participants. For those not able to read and write, a witness who was not associated with the study verified the consent. FGDs were conducted in Chichewa, a local language used in the two districts.

RESULTS

Study participants

At each health facility, we interviewed the in-charge and service providers for both family planning and immunizations. Two Program Managers who coordinate family planning and immunization in each district and two at national level (one for each service) were also interviewed. FGDs were conducted with mothers who accepted family planning and immunization referrals as well as those who refused. Each FGD comprised of 6 to 10 participants. As for women who refused to be referred for family planning, there were not adequate numbers in some of the health facilities. As a result, interviews were done with the women that were available. In addition, we conducted two FGDs with fathers with children under the age of one. Additionally, up to 3 district representatives and two national Ministry of Health representatives were interviewed based on their involvement in the program and involvement in decision-making related to scale up of this activity as shown in Table 1.

Table 1: Respondent characteristics

Respondent type	**Number**
Facility Supervisors	7
National Program Manager: Immunization	1
National Program Manager: Family Planning	1
District Environmental Health Officers	2
District EPI Coordinator	2
District Family Planning Coordinator	2
Family Planning provider (Nurse)	8
Facility based HSAs	8
Community based HSAs	4
FGDs with Fathers of under one children	2
FGDs with Family planning referral acceptors	16
FGDs with Family Planning referral refusers	13
IDIs with Family Planning referral	3

refusers	
FGDs with Vaccination referral acceptors	8

NB: FGDs comprised of 6 to 10 individuals

Service providers' roles and responsibilities

The service providers included in this study had different roles and responsibilities as shown in Table 2.

Table 2: Roles and responsibilities of service providers

Service provider	Roles and responsibilities
National Family Planning Coordinator	Supervising and mentoring HSAs on how they should on-the-job trainings
National EPI Coordinator	Programme planning at national level
District Environmental Health Officers (DEHO)	Drawing up of the program for EPI service providers, pretesting the IEC materials and conducting monthly as well as quarterly EPI and Family planning supervision
District family Planning Coordinators	Coordinating and overseeing all family planning services in the district
District EPI Coordinators	Coordinating and overseeing all immunization services in the district. Providing materials used for providing immunizations, ensuring immunizations are being provided in an appropriate manner and ensuring that immunization and family planning services are being offered at the same service delivery point.
Facility in-charge	Overseeing facility operations
Family Planning provider/Nurse	1. Providing family planning services to clients at the health facility 2. Providing maternal and newborn care services 3. Referring women and their babies for vaccination 4. Prescribing antiretroviral drugs 5. At times attending to patients in the outpatient department
Health Surveillance Assistants	1. Conducting awareness campaigns

Benefits of integrating immunization and family planning services

Benefits of integrating immunization and family planning Services as perceived by service providers

Increase in the uptake of immunizations and family planning methods

Health workers including family planning and immunization providers were asked about benefits of integrating family planning and immunization services. Most health workers such as HSAs and nurses feel that integration has changed the way services are being provided. For example, in the past, women would be given a different date for family planning if they came for immunization but now both services are provided at one time. As a result, more children are getting immunizations as their mothers come for family planning as commented below:

> *"Yes, it has changed; many children are now getting immunization as their mothers come for family planning".*

> *"there is a noticeable change because the number of people that's now on family planning has increased as compared to the previous figures because nowadays when there is an outreach clinic, people can get both immunization and vaccination services at the same time. And the outreach clinic is meant to reduce the distance that the women travel to go to the clinics so they can just get everything there"*

Integration has boosted the number of women receiving family planning methods

Most of the health workers noted that integration has benefited uptake of family planning, as women are now able to get family planning methods when they come for immunizations. This was expressed by majority of service providers as quoted below:

"The changes are there like the number has increased for those taking family planning services; in the past we would have maybe two women the whole month that accessed family planning services"

"The change is there, whereby instead of the woman travelling a number of times to come and access services they can access a number of services same day, this has increased the number of people accessing services. The women know that if they have other things to do at some other time they can still do because when they go to the hospital they will be assisted at the same time on two fronts. They know that if they go to the hospital, they will be assisted and the child will also be assisted, before due to laziness the women would just be home and sit down as a result they would end up having a pregnancy that they never prepared for because they were lazy to go to the hospital". (Family Planning provider, Dowa District Hospital).

These positive changes have also been seen at outreach clinics where the main focus was immunizations before introduction of integrated services as narrated below:

"there is a change because previously they were just doing immunization at the outreach clinics and some women would find it difficult to travel from their homes to here for family planning. Since this integration happened, some women are taking advantage of the village clinics so they can get family planning instead of just staying home without family planning methods".

Some health workers felt that integration has helped clear some myths surrounding use of family planning among some women as one health worker said below:

"I can say it is different from the past. Previously, family planning issues were a secret and people were not accepting that they can be taking family planning methods but now because of the messages that were given we see that there are differences because the number of people seeking the services is increasing as compared to the past because now people have realized that family planning is important in their lives".

Integration has changed uptake of family planning in women

Family planning providers observed that integration of family planning and immunization has greatly changed uptake of family planning by women. They noted that because of the constant checking for immunization status in children's health passport and continued health talks on both family planning and immunization, more women are now accessing family planning methods as seen in the quotes below:

"They understand the advantages of family planning because as we are giving health talks on immunization, we also provide talks for family planning so they understand the significance of family planning and they start accessing family planning."(Family Planning provider Ntchisi District Hospital).

Integration has led to times savings for both health workers and women as well as savings on resources

Health workers noted that integration is a time saver. It has reduced the workload as they are able to see a woman once in for example a week than before when they could have women come to the facility twice for immunization and family planning.

"Right now I can say we are killing two birds with one stone, whenever they are coming they already know that they will get family planning services and immunization"

Health workers also felt that this approach has changed the immunization program at their facilities as it has boosted the number of children getting immunized as stated below?

"Yah this (integration) has helped a lot to change especially that the immunization uptake will increase because women see the importance that the time they have come for family planning services and at the same time their children should get immunized so it helps us to have rise in number of children immunized at this facility". (IDI, Facility based HSA).

Another provider highlighted that integrated services have reduced the daily workload, as women are able to come for services on daily basis unlike before where they could come in one day:

"The change that I can mention is that in the past we used to have a lot of people who were coming to get family planning services at once, but now because we are doing this at a daily basis it seems the number of people who come to get family planning methods in a day is smaller, so the work is a bit lighter than the way it was in the beginning. Family planning back then was given only on Thursday and Friday so we were assisting a lot of people during those days, but now women are being assisted any day they want. If they come on Monday for check-up, and she has a child who is six weeks old, that woman is supposed to start family planning, and when they choose a method we give them that day". (Family planning provider (nurse)).

Health workers also observed that integration of services has also brought savings on resources such as fuel and personnel mostly in cases of outreach clinics where people from the district hospital or health centre have to go to the communities to provide a service as highlighted in the quote below*:*

*It saves resources since we don't need to send out some person some day and then send out someone else some other day whilst now the same fuel and personnel when they go out they do the job. (*Family Planning provider, Dowa District Hospital).

However, one health worker did not observe any change in the use of immunization since the introduction of integrated services

"It has not changed, It is being done the way it has to be done only that they are both happening at once". (IDI, Facility-based HSA).

Integration has changed the approach to providing services at the health facilities

Services providers such as nurses observed that the introduction of integration has greatly changed the way services are provided in the health facilities in a positive way. Before introduction of integration of family planning and immunization services, providers for both services only concentrated on their field without paying attention to other services. However, since introduction of integration, providers are now able to talk about both services to clients as narrated by some of the nurse providers below:

*"I believe before there was no integration everyone was just concentrating on what they are doing if it's about family planning we would just assist the woman on family planning with no concern on the child same way for those doing growth monitoring in the children there would be no concern if she is doing family planning but now they access all services so they save time and have no excuse". (*FP provider, Dowa district hospital).

Another nurse who is also a family planning provider concurred:

"That time we were only concentrating on family planning services, we were not checking the children's health passports but now because of integration we know that when a woman comes to the clinic, she is supposed to receive all the services at once not that she should come again for another visit". (Family Planning Provider (nurse) Ntchisi DHO).

Improvement in the referral process

Almost all health providers observed that the introduction of integrated family planning and immunization has greatly improved the referral of clients between the two services. Some facilities ensure that a woman is escorted by a HSA for example from immunization clinic to family planning clinic while other facilities make sure that a woman is given a referral note when being referred from one clinic to the other as narrated in this quote:

> *"At this facility we have HSAs, nurses and a medical assistant. When a child comes with a sickness or if the mother of a child comes sick we still ask the mother if the child received immunization. If the child has not been vaccinated the mother is given a referral letter to take the child to the hospital. If a woman is receiving immunization, she is also checked if she also needs family planning, then the provider refers that woman with a letter to family planning. When she has been helped at family planning they send back a letter to the immunization provider of how they have helped the woman, if she has received an injection if she needed one or if there were challenges. If a woman has come to receive family planning, the family planning provider checks a child's health passport, if the woman is supposed to go for immunization the provider gives her a letter to go to a health worker to be assisted, and that health worker checks if it's time for her to receive immunization, and if it is time they give the baby, then they report how they have helped that woman. (*Facility Supervisor, Thonje Health Centre).

The integration of two services has also enhanced referral of clients from one service to the other by service providers as stated here:

> *"When a woman comes with a child for immunization, if she is due for family planning, the HSAs refer her to the next room for family planning method. We also check the health passport book of the child if s/he is supposed to receive immunization. If she came for family planning, we also refer her to immunization". (*Family Planning provider, Ntchisi District Hospital).

Benefits of integrating immunization and family planning Services as perceived by women

Women with children under the age of one who either accepted referral from Immunization to family planning or family planning to immunization and those who refused family planning referral were asked about their perceptions regarding integration of family planning and immunization services in terms of benefits.

Protecting children from diseases

Most women receiving family planning methods were motivated to accept referral to immunization services for their children because of the value they attach to their children's health. These women were convinced by the messages provided by health workers on the benefits of immunization such as a healthy growing child and protecting the child from diseases as commented below:

> *"They just encouraged us to be taking the babies for immunizations because it protects from different diseases" (*FGD Respondent EPI acceptors).

Another woman concurred as below:

> *"I'm encouraged because I want my child to grow healthier and wiser".* (FGD Respondent EPI acceptors).

And this woman shared similar sentiments also:

> *"We move from Family Planning services to child immunization so that the child should be protected from diseases such as measles, tetanus and polio".* (FGD Respondent EPI acceptors).

The nature of counseling by health workers

Apart from realizing that immunization would directly contribute to the positive health outcomes in their children, most women were motivated by the way health workers provided the counseling on the subject where they also emphasized more on the health benefits for children as shown in the comments below:

> *"What encourages us to go for immunization is the counsel that we receive. The children are protected from a lot of things".* (Respondent in FGD EPI acceptors).

Another woman concurred with the above and noted that with immunization, a child does not get sick often compared to a child who has not been immunized as shown in the quote below:

> *" I consider it worthwhile, the counsel we received in the homes and also at the facility which tells us that our children need immunization because it protects them from different diseases and they do not get sick often and compared to a child who has not been immunized".* (Respondent in FGD EPI acceptors).

Motivating factors for women with under one children to access family planning

Children growing in good health

Women who accepted family planning referral from immunization were asked why they accepted referral from immunization to family planning. Several reasons were given with most citing being motivated by the fact that their children would grow with good health if the women themselves were using family planning methods**.**

> *"We want that when we go for family planning our baby should grow in good health and the mother should also be healthy"* Family Planning referral acceptor

Experiences with family planning by other women

Findings from this study indicate that women mostly learn from other women's experiences. In this study for example, some women reported using family planning because they had learned from the mistakes other women did and their consequences of not using family planning methods something they did not want to happen to them as a woman respondent reported below.

> *"We see someone who did not practice child spacing and we opt for contraceptives in order not to be like them".* Family Planning referral acceptor

Time savings

Almost all the mothers who accepted referral to either family planning or immunization, were motivated to access family planning because they were able to receive the service as they went to get their children immunization especially that they did not have to walk the long distances to the clinics twice as shown below:

> *"It is really helping because long ago, we found it difficult to go for FP because from here to district hospital, it is a long distance. So many people were not going for FP but nowadays many people are practicing FP".* Respondent in Family Planning Acceptor FGD, Nkhono outreach

Benefits of integrating immunization and family planning Services as perceived by fathers

Time savings

The fathers of children under one were also asked about the benefits of immunization. Most fathers shared similar sentiments with the mothers in which they also cited the high protective efficacy of immunizations against a number of diseases and saving on time for both mothers and service providers as well as allowing fathers and mothers indulge in other activities as expressed by most fathers in the quotes below:

> *"There are benefits for the baby to complete the immunizations in the proper order, because it helps so that the baby should not be attacked by any diseases that may come, and they grow up healthy, the baby does not fall sick often because they have received all the vaccination at the right time"*

> *"The benefits of receiving all the vaccinations till the end are that the baby is protected for all the diseases that the baby could have been attacked by, so there are some benefits there:* Father of under one child

> *"This is very good because it has reduced the time the mothers were wasting instead of doing house hold chores due to coming different days for immunization and family planning services. This new program of all this (family planning and immunization) happening at one time and place has also helped the families so that it should not be a burden on the mothers that leave other duties and children at home, the health facility is also quite far in this area about 6kilometers so this integration is helping so the mother does not have to walk this distance twice to access the care. The men also escort the women to the hospital for these services so the integration is also giving us (men) time to do some businesses and going the field to farm*

And others had this to say:

> *"In short I can just say that its very good because the mother is able to do two things at one time, she has gone for immunization and has also accessed family planning services, this makes the whole endeavor easier and the doctors and HSAs can go do other work on the day that the same mother would have gone again".*

Benefits of integrating immunization and family planning Services as perceived by program managers

Program Managers were asked of their perceptions regarding the benefits of integrating family planning and Expanded Program of Immunization. All the seven participants, both at National and district levels felt that integration of services had several benefits both to health service providers, service users and the system as a whole. Some of the participants focused on the economic benefits of integrating from the perspective of managing and running health services. For example, one of the district managers commented:

> *"Yah, you understand in terms of resources; resource mobilization is the big issue. This time around we are surviving on meager resources. So there is no way we can be doing these as different entities all together. So, in one way or the other, since they are interrelated, we have to do them together. So it saves a lot on the economy as such".* (DEHO, Ntchisi).

Another participant welcomed this initiative of service integration

> *"The approach is quite good and I like it because we are using the same HSA to provide several services… For example, the same HSA can do immunization and family planning which is part of maternal neonatal health care service. So it is really important".* (IDI, National Coordinator/Principal reproductive health officer).

In many cases participants focused on the benefits towards women who access the services. Participants explained that integration has reduced the time and number of visits women made to access services.

> *"The most benefit that I have seen; we have reduced time (number of visits) that a woman travels to the clinic or to meet a Health Surveillance Assistant to receive this service such as to receive immunization or to receive family planning but now time has been reduced because they are going to receive both services at the same time".* (IDI, Deputy DEHO, Dowa).

Another respondent compared the present with the situation before the integration:

"In the past they (women) would go on different days, the first to vaccinate her baby and the second for family planning but now both these services are being accessed in a single day".

The benefits towards health care providers were discussed in terms of reduction of work load and expanded role of Health Surveillance Assistants. Participants felt that involvement of HSAs in providing family planning services has reduced the workload of the nurses who most of the times were engaged in providing multiple services.

"In a positive way especially to providers because workload has been reduced they target the same people who want to use family planning service but before integration, HSAs were not offering family planning services so with the coming of integration, HSAs have started offering family planning services hence reducing the workload.

Similarly another participant said:

"HSAs did not offer DMPA [injectables] family planning method so those who used to offer this method like nurses now their workload has been reduced." (EPI Coordinator, Dowa)

Challenges and Barriers to accessing integrated immunization and family planning services

Challenges and Barriers to accessing integrated immunization and family planning services as perceived by health workers

Lack of male involvement in family planning

When asked about barriers to family planning that remain, some health workers felt that men restrict their wives from accessing family planning because they are not involved as stipulated below:

"In my view I think the problems are coming due to lack of male involvement; there are some men that are restricting their wives from accessing family

planning services so women have devised to use two health passport where the other health passport is strictly for family planning services, in that way the husband does not know that the wife is on family planning and as providers we know that if women are still finding means to access family planning services regardless of the husband's stand then it means that the women have understood about family planning and have accepted it. (IDI, Community-based HSA)

Misconceptions

The health workers in this study cited misconceptions such as rumours and beliefs about family planning and as one of the barriers to accessing family planning by women. They proposed proper counseling as one of the solutions to this problem as narrated below:

"If they hear rumors and have some fears about family planning, some women may not access the services. So there is need to counsel them properly to make them understand because the communities talk a lot of things about family planning. So if they have little information, there is need to help them understand how the drugs work; because for example people say that when you are taking family planning methods it means you will never have a child so there is need to dispel those rumors. If you counsel the person properly, she understands".

"There are several reasons that may hinder women; for example; beliefs; Beliefs have made some women not to access family planning services based on how they have been brainwashed. In addition to that, the abuses that women face in the families prevent women from accessing the family planning services. But mainly they are beliefs".

Increased workload

Most health workers who responded to this question cited increase in the workload as a challenge that has come with integration of family planning and immunization. As a result clients wait for a long time to be assisted as commented below:

"*The workload increases, we are few health workers here. Another thing is the people are kept waiting for longer, if you are alone then you have to give family planning and then you should take them for immunization, and search for someone who has to help them with that if you find that there is no one there". (IDI, Community-based HSA).*

Another one had this to say:

"It's as I said that people make mistakes because of too much workload and because you are doing different services at once so it can be confusing".

Documentation challenges

Respondents observed that the increased workload often makes them forget to complete some of the required information

Inadequate Supply of Family planning Methods

Most respondents to this question mention inadequate family planning method as one of the challenges with integrated family planning and immunization services as quoted below:

"Some family planning methods are insufficient and sometimes not present such that we have to turn back the women".

Challenges and Barriers to immunization schedule completion as perceived by women

Personal reasons

In terms of barriers to adherence to immunization schedules, most women cited personal reasons as mainly contributing to inability to finish immunization schedules for their children such as attending community activities, lack of knowledge and more as expressed below:

"Problems like there is a funeral in our community, you can't go to hospital to get the immunization." Respondent in FGD for Vaccination referral acceptors
"Not taking doctor's advice seriously". Respondent in FGD for Vaccination referral acceptors
"Poor time keeping". Respondent in FGD for Vaccination referral acceptors
"*It is just their lack of knowledge because the child is young and the mother has to be determined in ensuring that the child gets all the appropriate immunizations at the right time".*

"There are different reasons. Sometimes it is the failure of the mother but sometimes, maybe the child is sick".

"Some can forget the day they are supposed to come with their child".

Time

Women in this study provided a number of reasons for not accessing immunization services in some of the health facilities in Dowa and Ntchisi. The mostly cited reason was time where women either had to wait for a long time to get assisted or they had to be turned back for not keeping time. This has been expressed in the quotes below

> *" If we delay just by a little time we are told to go back home and come the next month".* (Respondent in FGD for family planning acceptors*).*
>
> *"Ah, no. Maybe waiting time because it happens that weight has been checked, so we wait for the immunization provider to come and provide immunization service".* (IDI, family planning referral refuser*).*
>
> *"There are a lot of people and for us to get immunization it is very late*". (Respondent in FGD for family planning referral refusers).
>
> "*Immunization come from very far, from Nkhuzi Health Centre so comes here late so we end up leaving this place very late. Our friends who are not immunizing their babies that day are long gone while we are still busy with immunization". (*Respondent in FGD for family planning referral refusers).

Inadequate Vaccines

In addition to time, a number of women were not able to access services because there were not enough vaccines at the facility and had to be sent back home as these women narrated:

> *"Some times when we come for immunization at times they don't have enough and they tell us to come the next month". (*Respondent in FGD for family planning referral acceptors).
>
> *"Sometimes the vaccine is not available so the children do not get immunized*". (Respondent in FGD for family planning referral acceptors).

When asked about their thoughts on immunization at the facility, some participants who refused family planning referral expressed unhappiness with services because they were asked to buy drugs when not available and staff attitude towards provision of services.

"We are not happy when there are no drugs (vaccines), because when the children receive the immunization, they are protected. So when the drugs (vaccines) are not available and the workers are lazy, we are not happy".

Although the majority of the women in this study mentioned that there were not many challenges regarding referral from immunization to family planning, a few women cited unavailability of the service (immunization or family planning) at the time they needed it as one of the challenges.

"The problem is that the services are only provided here and if they have not come here, they have to go to Maunda, to Matapa to access the services and because it is far, a person chooses not to go but if it is provided here, because it is close, they come quickly".

"Yes. Like in my case, I started last month to try to access family planning services but what has happened is that they did not come here on those specified dates".

Barriers and Challenges of integrating immunization and family planning as perceived by fathers

Traditional beliefs

Fathers of under one children felt that women with very small babies usually do not use family planning methods because of beliefs attached to it especially when it is a first child where it is thought that use of family planning would interfere with fertility and the woman might not have other children as shown in the quotes below:

"The first reason that a woman with a small baby does not use family planning method is that there are some beliefs from the parents for example if this is the first child they say the mother is not supposed to be on any family planning method because they should know if the baby belongs to the father or if the woman is fertile that she can continue to conceive, so these are the reason that a mother can choose not to be on family planning when they have a small baby"

"I want to add that there are others that think that being on family planning while you have a small baby like my friend said for instance the first child this can lead to

infertility so they choose to wait till the second child is born and then they start family planning, not starting after the first child"

Side effects of immunizations

Some fathers in this study reported that the side effects women report regarding immunizations in children such as dizziness, loss of consciousness and inappropriate giving on injections were a great concern among them as expressed below:

> *" Concerns in this area are there concerning the immunizations like we have already said like with the family planning methods, some immunization raises concerns among some women because they say that some times the children can feel dizzy some can also collapse because of the immunization, this are e concerns that are there.*
> *"Some times when the child has received the vaccination the can be an injection site swelling, like for example when I was young and I received an injection my thigh was swollen so some people say that they can also have complication, so that is a concern"*

Another father added:

> *"I just want to add to what my friends have already said, we as the men of this area feel that the immunizations sometimes bring problems to the babies and expectant mothers especially to the children you find that maybe the doctor dint inject the baby properly and has hit the bone this can cause complications to the child maybe even disability, some children now walk with a limp because of the immunization, so to the parents when we see that the child has such a problem they end up stopping the mothers from taking the child for immunizations and result into using herbs".*

Religious beliefs

The fathers of children under one interviewed in this study had somehow different views on why some families do not vaccinate their children. Their views are mostly centered around beliefs people attach to certain things. For example, fear of having something bad happening because of vaccinations mainly influenced by religious affiliations or family beliefs was commonly cited by majority of fathers as shown in the quotes below:

> *"The other reason is the parent's beliefs that make the family not to be interested in their children getting immunizations as should be"*

"Sometime it's the religious beliefs, some religions restrict the mothers from giving birth at the hospital or even getting vaccinations"

"Sometimes it's because the mother gave birth at the traditional birth attendant so they don't have much knowledge about the immunizations, so that's another challenge"

"Some have fear because if they hear about other children experiences like collapsing because of the immunizations they think that when they go with their child they will also go through the same things"

Challenges of integrating immunization and family planning Services as perceived by program managers

Increased workload for HSAs

While involvement of HSAs in provision of family planning services was perceived as beneficial in reducing the work load of nurses, others felt that integration has actually increased the workload, particularly that of HSAs. These participants felt that the job of HSAs has increased because they are required to offer several services at once compared to the pre -service integration period where same services were offered at different times as illustrated by the following quote:

"*Of course, at first we had a challenge that now this is going to be an extra job to the HSAs. Yes, as much as it was their job description, it was happening at different times. Now that the services are happening at once, it was like more job to be taken at one time, of course it has benefits to the mothers".*

Lack of training for some HSAs

Many participants cited lack of HSAs training as a major setback to the effective implementation of service integration. Participants acknowledged that some of the HSAs were trained but there are others who did not receive any training. They noted that lack of knowledge, skill and appropriate attitudes as a major threat to the programme:

"*The challenge is that we still have some HSAs who are not trained; so those ones who are not trained are pulling us back but we need at least each HSA to be able to implement (integrated services); should have the expertise, knowledge or skill on how to provide the services. So we really need some to be refreshed while some must be trained for example in FP compliance. Not all HSAs are conversant with the compliance thing… It affects the implementation because it is like some people are exposed to that knowledge*

and skill while others are not exposed. So you can judge from there; some are able to implement and some won't implement as desired".

The lack of trained personnel was prominent in certain areas as narrated by one of the supervisors:

"In those areas which we visited, some HSAs are not well conversant with maternal and neonatal health issues, for example, community based maternal and neonatal health care services because Family Planning is another aspect and immunization is also another aspect and community based maternal and neonatal health care is another aspect and the HSAs are supposed to be trained on what they should do … it has to be part of integration".

Lack of trained HSAs in some areas resulted in delayed implementation of service integration

"*The most difficult part maybe I will say some of the HSAs are not trained and are making the program to delay a bit"*

Lack of transport

Lack of transport was also cited as another challenge. Participants explained that hard to reach areas are not benefiting as much.

"…, and as you know the facilities are very hard to reach; the roads are difficult to reach and some HSAs do not have bicycles for them to be able to visit the homes in their catchment areas so those are some of the challenges". (National Coordinator, Family Planning)

"*Another challenge we had of course of this is transport especially to the HSAs to the outreach clinics". (Deputy DEHO, DOWA)*

One of the participants feared the two programmes are not equally benefiting from the integration.

"You find that family planning is the one which benefits more rather than the EPI program in terms of coverage. The reason can be because coverage is already high. For immunization it is already high. Family planning is lower. Yes… So because immunization is high, you cannot see any difference".

Implementation of integrated family planning and immunization services

Implementation of family planning and immunization as perceived by health service providers

At health facility level, service providers seem to take every opportunity when in contact with women who have young children to explain about other available services. For example, when women come to the health facility with a sick child, service providers also ask about their use of family planning and check child's health passport for immunization status as this facility supervisor reports:

> *"At this facility we have HSAs, nurses and a medical assistant. When a child comes with a sickness or if the mother of a child comes sick we still ask the mother if the child received immunization. If the child has not been vaccinated the mother is given a referral letter to take the child to the hospital. If a woman is receiving immunization, she is also checked if she also needs family planning, then the provider refers that woman with a letter to family planning. When she has been helped at family planning they send back a letter to the immunization provider of how they have helped the woman, if she has received an injection if she needed one or if there were challenges. If a woman has come to receive family planning, the family planning provider checks a child's health passport, if the woman is supposed to go for immunization the provider gives her a letter to go to a health worker to be assisted, and that health worker checks if it's time for her to receive immunization, and if it is time they give the baby, then they report how they have helped that woman.* (IDI, Facility supervisor).

Similarly, service provision for family planning and immunization was reported to be integrated at community level as explained by the community based HSA below:

> *"My duties are making sure that children are getting proper under five clinic services, like immunization and also we provide family planning services like Depo-Provera, pills, condoms, and if there are some that have chosen long term family planning methods, we refer them to the health centers or district hospital".* (IDI, Community based HSA).

Other service providers had this to say on how the provision of family planning and immunization have changed since introduction of integration:

> *"Before the integration started, HSAs were giving injections to women at outreach clinics, people were just coming here for immunization, but now the women are able to receive both here".*

" Previously before this approach, each clinic was conducted separately. Family planning could be conducted on a Wednesday, immunization on a Tuesday…Each service was provided individually but now we are able to integrate the services".

Findings from this study show that integration is implemented in different ways in the health facilities (Table 3). For example, a nurse provider for family planning methods at one health facility mentioned that she was only involved in providing family planning services while immunizations were provided by HSAs as narrated below:

" My responsibility is to provide family planning services to women for example Depo-Provera, Norplant, implanon, condoms and pills"……"My responsibility is to refer women there to access immunization services, once a child is born he/she is given BCG to protect him from polio, so I ask the mothers to bring the child after six weeks to receive another shot of immunization".

This is what another nurse had to say when asked about who provides immunization

"That is provided by the HSAs".

Nurses who provide family planning services in this study noted a great change from the way services were being implemented since the introduction of integrated services. For example, they are now tracking children to ensure that they complete their immunizations. This was not happening before integration as shown below:

"In the past there was no tracking for the children who were receiving immunization but now there are procedures that we are following for example we track the children until they finish their immunization, chiefs also take part in tracking. At the under five clinic they also have information for every child which they use for tracking". (IDI Family planning provider (Nurse).

Another nurse observed that there has also been improvement in terms of referrals from family planning to immunization since the introduction of integration as stated in the quote below:

"I see a change because previously it was the woman who was voluntarily opting for family planning services but nowadays we check the woman's health passport to see if she needs family planning methods or just to remind her the appointment date to refill".

In terms of documentation on referral, one nurse, a family planning provider, highlighted the use of an escort who apart from escorting the client to the clinic, also delivers the message on the services client has already received and reason for referral as explained below:

"The person who escorts the client to the other provider is the one that explains what services the client has already received and she keeps track of whatever the client receives and they record that in all registers".

Escorting a client from one clinic to the other was mentioned as one of the newly introduced procedures since the introduction of integrated services as stated below:

"A client from under five clinic is escorted by the HSA to the family planning section, so that she should not be on the queue again or sometimes if she comes for other services she is escorted by a clinic attendant to receive family planning or immunization services"

However, in some facilities, a client was given a referral note to present to the provider as stated here:

"When a woman chooses to receive family planning, she is given a note to take with her to where she can get".

The nurse provided the following reason on why they escort women from one clinic to the other:

"Yes, because if we send her without being escorted the other clients she finds on the queue tend to complain that she will delay them so there is need for someone to escort her and explain to the other clients on the queue".

At district hospital level family planning and immunization are provided in two different places by different providers. Family planning is largely provided by nurses while immunizations are largely provided by HSAs. These two places are sometimes located a few metres from each other and sometimes just next to each other as reported below referring to the location of family planning and immunization clinic:

"Maybe a quarter kilometre because immunization is provided over there?"
"No in this building but they use the door behind us"

Health providers noted that integration of family planning and immunization has enabled them to provide both services on the same day compared to the period when the two services were not integrated as narrated below:

" In the past when a woman came for immunization of her baby she would go somewhere else to be given family planning but now we mix both services. The baby receives immunity and the mother gets family planning".

In terms of frequency of service provision, this is what some providers had to say:

" We administer every day and when there is a woman who wants to get her baby immunized she is also given that at the same place because there is also a hospital register present. So any day of the week a woman can access these services excluding Saturday and Sunday". IDI Facility based HSA

In outreach clinics, immunization and family planning services are provided on specific dates. Health providers announce through chiefs and other media about the dates as highlighted in the table below:

Table 3: Provision of integrated family planning and immunization by level of facility

Service	District Hospital	Health Centre	Outreach clinic
Immunizations and family planning	• Both services provided from Monday to Friday • Provided either in one place or different places depending on the way the facility is structured • Family planning is largely provided by nurses • Immunizations are largely provided by HSAs • Referred women are given either a referral note or have notes written in their health passport	• Both services provided from Monday to Friday. However, some health centres have specific days for providing the services • Family planning is largely provided by nurses • Immunizations are largely provided by HSAs • Services are provided either in one place or different places depending on the way the facility is structured.	• Services provided on specific dates • Awareness about dates is made through chiefs and other village foras • Services mostly provided in one place • Services mostly provided by HSAs

Implementation of family planning and immunization as perceived by women with children under one

In terms of implementation of integrated family planning and immunization services, a few women in this study observed that family planning and immunization are not necessarily provided at one place, but rather in different places but on the same day as expressed in the statements below:

> "*They don't necessarily send that person to the family planning clinic. The person goes by herself and they do family planning every Thursday".* (IDI for family Planning referral refuser).

When asked about the messages or information that women received regarding immunization, majority of women could not recall messages given by health workers during immunization of their children. Most observed that they were only told about the number of vaccines remaining while few women said that the health workers were able to tell them the advantages of the vaccine their child was receiving as the following women narrate*:*

> *"They said that the vaccination on the leg helps that the baby should not get polio, and they said the other one protects against cough like TB".* (Family planning referral refuser).

> *"They said it protects the babies from diseases and the one that's just a droplets is so that the baby does not get sick so the vaccinations are so that the baby doesn't get sick or disabled".* (Family planning referral refuser).

> *"They say they had given the vaccination on the leg because they wanted to prevent polio and the one on the hand was to prevent measles".* (Family planning referral refuser).

A few women in one district revealed that in order for them to receive a service they wanted, they were asked to partake in some activities at the facility such as cleaning and drawing water as expressed below:

> *"Yes there are other things that surprise us when we go for services at a facility like they tell us that we are not going to get services if we don't clean the facility. Until we sweep and draw water that's when the Health Surveillance Assistant starts assisting and sometimes he doesn't start until it's*

late and tells us that there are no malaria test kits and yet he would have told us earlier so we could have made a decision to go to Malomo to get the service. When we then go to Malomo they turn us back". (Respondent in FGD for family planning refusers).

Another women had the following to say:

"They say that if you are not a member of Mai Khanda then you should not vaccinate your child here or bring him for under five clinic". (Respondent in FGD for family planning refusers).

One woman noted that it was difficult to bring a child on a day that is not scheduled for the service as she narrates below:

"The other information that makes me wonder is that they say we should bring our babies on either Thursday or on Monday." (Respondent in FGD for family planning refusers).

Commenting further on the implementation of family planning and immunization integration, some women observed that the services are provided in different places and some are not told by service providers to go to either of the places to access the service but rather, they go on their own if they want to have the service as expressed in the quotes below:

"Those that came for immunization have their own side where they do their things and those doing family planning have theirs". (Respondent in a Family planning refusers FGD, Nkhuzi HC)

"They don't necessarily send that person to the family clinic. The person goes by herself and they do it every Thursday"

When asked about whether service providers talk about child immunization the time women come for family planning, three out of six women in a FGD of said they have never heard that and some had never been told as shown in the responses below:

"No"
"I have never heard".
"I have never heard". (FP Referral acceptors Dowa DHO)

Although some women felt that there was no difference in the information they received from service providers and thought that the only change was the addition of other vaccines, three out of six women in a focus group discussion noted that service providers talked about family planning and sometimes offered family planning methods at the immunization clinic as shown in the table below:

Table 4: Views of women on the information received from service providers

Felt there was no change	Felt there was change
"From last year, there is no difference in what they are telling us. The immunization they talk about is what is administered to our children. The only difference is that they have added immunization for when the child is a year old because of diseases that are still affecting children". *"Just as my friend has said, they have added the types of immunization being administered to children so that they are protected from the new diseases".*	*"It is happening because when the child is born, we are supposed to wait for 6 months before we take the child to the health facility. They tell that we can start using contraceptives at this same time".* *"It is happening because when we go for child immunization, it is possible for us to get contraceptives".* *"It is true because they tell you to come after 6 weeks and when we come they say they should be immunized. They also counsel you about family planning so you can get both services, immunization of the child and also contraceptives".*

On inter-facility referral procedures women in this study noted that they were not given any referral card as most information was relayed verbally as shown in the quotes by Family planning referral acceptors at Thonje health facility in Dowa district below:

> *"They don't give us anything they just tell us verbally"*
>
> *"No, they don't give". (Referring to a card).*

Respondents in a FP Acceptors FGD at Thonje Outreach clinic

Although providers mentioned that there is an escort for women referred to either family planning or immunization; women had different views on referral procedures

where they said they are usually not escorted and sometimes information is not recorded as shown in the quotes below:

> *" We just go with our health passport and get family planning services at the referred health centre".*

Another woman had this to say on referral:

> *"We report to the providers and they record the next appointment date".*

Privacy and confidentiality issues from women perspectives

Findings from this study show that women who either accepted family planning or immunization referrals felt that they were not forced by service providers to as they felt it was their right to use the services as expressed in a number of quotes below:

> *"I was not forced I wanted to".*
> *"I wanted to go I was not forced"*
> *"Everyone has a choice no one can force them to go for family planning or not"*

> *"It's your right to be on family planning because anything that happens at your household is your own problem, because it happens that the baby is one year old and you become pregnant so you have the right to go access family planning so that the other child grows up in good health"*

> "*It is an individual choice, it is not possible for you to know that the child needs immunization and then you don't go. You have to go for the child to be protected from a lot of things".*

Observed changes in immunization provision and use since integrated approach was introduced as expressed by women

Women participating in this study were asked about changes they observed in the immunization provision since introduction of integrated approach**.** The women who

responded to this question gave different views on this with some recognizing the changes while some not being able to observe any changes.

> *"From last year, there is no difference in what they are telling us. The immunization they talk about is what is administered to our children. The only difference is that they have added immunization for when the child is a year old because of diseases that are still affecting children".* Respondent in FGD for vaccination referral acceptors

Another woman had this to say on where the services were being provided:

> *"Those that came for immunization have their own side where they do their things and those doing family planning have theirs".* (IDI for family planning referral refuser).

Also, this woman felt that some women go for a service at their own will without being referred by a health worker as below:

> "*They don't necessarily send that person to the family planning clinic. The person goes by herself and they do it every Thursday*". (IDI family planning referral refuser).

However, majority of women have observed that since integration of services started, they are able to get other services such as family planning when they came for immunization as these women narrated:

> *" It's happening because when you come for immunization we are able to get family planning on the same day*". (Respondent in FGD for vaccination referral acceptors)

"There is some benefits because the baby gets immunized at the right time and I would also get my family planning at a good time, making me a happy and proud mum that my baby is growing healthy and I will be able to do other house chores". Respondent in FGD for vaccination referral acceptors

Effect of service integration on family planning as perceived by program managers

Participants were asked a series of questions to find out about the barriers and motivators for FP-immunization referral completion and their perceptions of the benefits of service integration on family planning and uptake of postpartum family

planning services. Perceptions of the women's views on the same were also sought from the programme managers and coordinators. Narratives from the participants revealed some inconsistencies regarding their perceptions of the impact of integration on family planning.

Gaps in program reporting

Lack of reports from the implementing districts to national level was cited as one of the challenges that impacted on the participant's ability to competently comment on the success of the programme. (National Coordinator).

> *"Unless we have a report. Of course, I have not yet received the report to say how or what are the benefits of that but looking at what was happening on the other part."*

Short implementation period was also perceived as a challenge to effectively evaluate the success of the programme.

> *"Within a short period of time, some of the challenges we may not see them in a short while because the program just started…"*

Although lack of reports and known targets for the integration initiative were perceived as a challenge, some participants were able to comment on the performance of the programme based on observations.

> *"In a positive way though I do not have the report but the FP utilization has increased though FP is difficult really because you do not expect 100 percent of FP because there is no way; the whole population will go down.*

Some participants examined the success of the programme by examining the effect the programme may have at various levels of service delivery. For many the impact was less felt at the secondary level (District hospital) compared to the primary level (health centers and outreach clinics).

> *"…The issue is that we at the district, we do provide our services on daily basis; this room, family planning, the other room immunization services whereby when people come they know that these services are provided on daily basis because the integration was there before. It is unlike the outreach clinic that is run by HSAs where they provide immunizations only. It is where we can say now people are accessing both family planning and immunization services."*

Effect of service integration on postpartum contraceptive uptake as perceived by women

When asked about family planning and breastfeeding, there seems to be high knowledge regarding the role of breastfeeding and prevention of pregnancy among women with under one children. Majority of women said having been told by service providers that exclusive breastfeeding prevents one from getting pregnant as shown in the quotes below by women participating in FGDs:

> *"They explain that from the day the baby is born until they are 6 months old, if you are breast feeding exclusively you cannot get pregnant fast"*
>
> "*They tell us that when we frequently breastfeed our babies, it acts a way of family planning".*
>
> *"They just said that when you are breast feeding exclusively it's one way of family planning, you can't get pregnant"*
>
> *"We heard from our volunteers that when you are breast feeding exclusively every 30 minutes you don't become pregnant soon"*

However, there were some few women who have never heard that breastfeeding could prevent pregnancy but only help the child to grow with good health as shown below

> *"They explain that the baby should be breast fed exclusively we don't know what they mean"*

Even though most women were aware about the role of breastfeeding as either contributing to the health of the child or preventing pregnancy, there were some women who said had never heard anything regarding breastfeeding and family planning. Some women had this to say:

> *I have never heard that exclusive breast feeding can be a family planning method.* (FP referral refuser, Malomo outreach).
>
> *" I have never heard that breast feeding is a family planning method".* (FGD family planning referral refuser, Malomo outreach).

"No, nothing has ever been explained to us". (FGD family planning referral refusers, Malomo outreach).

Program managers perceptions regarding integration of services and postpartum family planning

Participants were asked their opinion on whether the service integration had an effect on postpartum family planning. All participants responded to this question indicated that the integration has done very little or nothing to improve on access to postpartum family planning.

"…There is that little… a slight change that we cannot define"

Further probing with a different participant on the matter revealed:

"Not much because the integration we are talking about, it is the provision of Depo Provera, maybe pills, condoms… that doesn't take a person who has just given birth to take that service yah… That is why I am saying that not much has changed for these women"

Similarly another participant commented:

"Not that much because integration we are talking about is much more about short term family planning methods like Depo Provera, condoms and pills which do not necessarily need to be used soon after giving birth "

Those that said yes commented on provision of family planning in general.

"It has increased because even if we look at our indicators; much that I do not have the figures, there is an increase of uptake of FP services…… The effect is that there is more demand for the products; the depos, you know mothers like depos. Much we advocate also for other contraceptives, there is much demand on Depo-Provera products"

Effect of service integration on availability of family planning and immunization commodities as perceived by program managers

Availability of commodities for family planning and immunization seemed not to be a big concern for the programme managers and coordinators interviewed. However, participants observed that sometimes they do face stock outs and this might be a challenge with scaling up of integrated services.

"But the challenge sometimes is that the service is out of stock, for example, the contraceptives … sometimes are out of stock so they have no choice. But in actual sense, when the commodities are always available, it is really a good thing".

Some facilities anticipated that there is a possibility that their facilities may experience stock outs in the near future

"*In fact looking at the way resources come, you might not right out say that we might not have faced this challenge because although we are surviving on the meager resources that we have currently but we still have to leave by the means. So there might be those challenges to come but we will see how we can confront them head on, there are so many other services as well".*

The immunization services faced major challenges with maintenance of cold chain at the point of service delivery because of malfunctioned refrigerators

"About commodity supplies as vaccination, as DHO we order from CHSU so we organize logistics to bring our supplies here but the big problem is storage of vaccines for example vaccination needs to be stored in the cold chain system like fridges. So we have some malfunctioning fridges whereby in other areas they end up saying as a facility we have run out of vaccination or because the fridge has malfunctioned so we need to improve storage system as well".

Effect on collaboration with other technical areas

Respondents reported no negative impacts on collaboration with other technicians in other programs. The integration had brought a better understanding of some other issues. An example was that of GVHs whose understanding of the concepts EPI and FP had improved.

"Well, there is an improvement. Like FP talking to each other regarding this and also apart from MCSP, Save the Children has also increased the collaboration differently with partners also of the program".

Implementation adjustments and actions taken during supportive supervision as reported by program managers

All participants interviewed reported that they have been involved in supervising service providers at work. Many of them also participated in training/orientation of Health Surveillance Assistants on service integration. When asked what they do during the supervision visits, some indicated that they use a checklist to check health service provider's adherence to procedures. Others indicated that they ask questions and record the responses.

> *"We do have monthly and quarterly supervision in EPI, so we do integrate with RH. So there is a duty rota which is produced. So we do move from one facility to the other; we ask questions to the HSAs at the facility, so they respond and we record. So the involvement was in that way"*

When asked to comment on their observations during the supervisory visit, many indicated that health service providers were happy with the introduction of integrated services. They also noted that number of women patronizing the services has increased.

> *"We have actually seen an increase in some of our performance indicators; yes, like coverage in terms of family planning and EPI. Yes, they have really gone up".*

There were no specific adjustments and improvements that were made during supportive supervision. However, participants made reference to adjustments that were made at the onset of the programme. For example, involvement of community leaders to raise awareness about the introduction of integrated services.

> *"To increase community sensitization to take a leading role like we already started meeting with GVHs (Group Village Headmen/women) to help us with sensitizing the community so that there should be uptake of services so that the community should know that when they go for vaccination service they can also receive family planning services and as a District we need to improve the places we use to offer vaccination and family planning services because supplies are kept by HSAs apart from vaccines which are kept at the health centre which is taken when going to outreach clinic. So if we can improve the places used for offering these services so that we can be able to divide them into two; those who need vaccination and those who need family planning, it would really help us*"

Views on continuation of family planning and immunization integrated services

Women's' Perceptions about scaling up of integrated services

Promotion of knowledge of other services

All the women who responded to this question said that the integrated services should continue because people get to know about the other service when they go for another service as some of the women who accepted to be referred to family planning said below:

> *"Yes, they should continue because some get to know about family planning when they go for immunization so they can then decide about it then". Respondent in FGD for family planning referral acceptors"*

> *"They should continue because some women, if they came for family planning, they run away and not get their children immunized. After checking the Childs health passport and they identify that the child has not been immunized, they send you at the same time for immunization".*

Time saving

Although some women mentioned closeness of the clinics to their homes as reasons for continuing integrated services, others said that integration saves on time, as they are able to receive two services in one trip to a health facility. Women also felt that it was a good practice to be informed about either of the service when they go to seek one of the two services.

> *"It's important because we do both things at once, in one trip"*
> *" It is good because they remind us what to do. And we come for services".*
> *"The good thing is that you get 2 services when you had initially planned for 1".*

Program Managers' Perceptions about scaling up of integrated services

All participants felt that the integrated approach should be scaled to other districts as demonstrated in the following quotes:

"Yes, if it will be scaled up to other districts at least each and every area where there is an HSA because HSAs are in all the districts in Malawi and they must be conversant with provision of FP, EPI issue and CBMN (Community based maternal and neonatal health) care should be added. It will make it a more comprehensive package"

Another participant said:

"Yes, it is worth scaling up to other sites."

Participants felt that benefits of the integrated approach were substantial including ultimately reducing the poor maternal indicators, preventing unwanted pregnancies and saving time for other activities by maternal and child health care service seekers as explained below:

"We are here to provide maternal and child health services, whereby a caregiver can come here with a single complaint but she can benefit from many services"

And another one was quoted;

"it is very paramount that we integrate these services so that we can avoid unwanted pregnancies and at the same time giving the mother time to do other activities since she will have more time rather than having to come again to the facility to look for services".

Another participant further said

"*There was no room for missed opportunities as such other districts should adopt the approach".*

Suggestions for scaling up as suggested by service providers

Improvement on presentation of information on job aids

Commenting on job aids for family planning, one service provider noted that there is need to make some improvements on the presentation of information so that everything appears on one page as stated below:

"Of course I really can't say much since most tools are in Chichewa, perhaps one concern should be that information should be provided on one page". (Family Planning provider, Dowa District Hospital).

Community involvement

Another provider had this to say on the need for community involvement in the implementation of an integrated program:

"If they want to start this program, they need to involve the community as we did with the ADCs so that they help in disseminating the messages in the communities and there should be good coordination between HSAs and nurses and the community. There should be a good link. It means the process will move on well".

Availability of resources

Some service providers felt it was important to have adequate supply of resources such as drugs/contraceptives to respond to the increased demand the program would create as alluded to in the quote below:

> *"When the program starts, there is need for availability of resources. There is need to source drugs. Like I said, in July and August, there was a short supply of Depo. This happened because the HSAs were trained and people in the communities get the services from their communities so there is need for adequate supply of drugs all the time; like pills, condoms or depo, they have to be available all the time so that people should not fail to access the services".*

Improvements to be made as suggested by women

Women with children under one in this study were asked on the improvements to be made in the provision of family planning and immunization services. Most respondents wanted to see strengthened supervision, availability of commodities, and management of time to avoid long waiting as presented in the list below. None of the women who accepted either family planning or immunization referral who responded to this question gave suggestions on improvements to be made (Table 4). The suggestions were mainly provided by family planning referral refusers.

Table 4: Women's suggestions on improvements to be made on the integration of family planning and immunization

1. "They should come closer… they should not be commuting".
2. *"Maybe if they talk about the benefits of family planning the people would want to access the service because people say so much that scares us, they say you*

feel pain and it many injections that's why people don't want to come for family planning services".

3. *"I believe for there to be an improvement in service delivery at this facility, there should be no corruption amongst the staff".*
4. *"There is a need for health inspectors to come often and ensure that things are going on well, because the staff members at this facility are very neglectful. They do not take care of us the way we are supposed to be taken care of".*
5. *"We are satisfied with service delivery but they start work late and we are a lot of people. Instead of them to start work at 7:30 they can start and 8:00 and they just move about. We come to get free services and when they ask us to buy, that is not good".*
6. *"For those that want family planning implants, they tell us to go and buy it. That should be improved".*
7. *"By doing door to door talks about family planning".*
8. *"The problems that the Health surveillance assistants face are numerous. They don't have houses and you find that where we do the clinic is not a stable place and we have to continuously ask for a place to be doing the clinic".*
9. *" We don't have a stable place where we can be doing the clinic. We are here at a church which has an owner so it would have been better if they found us a space where we could be doing the clinic"*
10. "*There is nothing health care providers can do to change things because family planning resources comes along way so it is our responsibility to follow what we are told*
11. *They should have easy transportation of vaccines. They can also try to find a way of keeping immunization right here in our community so that it can be transferred here prior to EPI day"*
12. *"There should also be encouragement from the decision makers, make sure that they come here in time. Because even if there might be transportation availability they may not come early if not supervised and encouraged"*
13. *"I agree with my fellow women because we wait for a long time that we end up giving up but they tell us to keep waiting, sometimes they arrive here around past twelve o'clock in the afternoon"*

Improvements to be made as suggested by fathers

Human resource

Fathers noted that sometimes women spend more time at the outreach while waiting to be assisted due to the large population that needs to be saved. The need for more human resource was cited as a suggestion for moving forward as currently service providers are usually few in numbers.

> *" Just to add what my friends have said, this is good however I can still see there being a problem that needs to be addressed, when the clinic is at Ndendere there are usually not enough health workers because these villages are very big so it takes long for the women to be assisted, for example at times there are just two health workers and you have so many people going to this clinic so I still feel that maybe they should add volunteers to be assisting at this outreach clinic so that there should be less work for the health workers.* (Father of under one child, Ndendere outreach clinic).

Requirements for strengthening the integrated approach as reported by program managers

During the interviews ensuring the availability of resources was identified as a major requirement. This included increasing number of staff, commodities, the contraceptives, and the immunizations adequate storage facilities IEC materials. Other resources include financial resources

> *"The recruitment of HSAs also requires a lot of resources, money to recruit the HSAs so it's a financial issue and has to be available".*

Participants felt that there was need to widen the scope of involvement of the various stakeholders. They acknowledged that the program was doing well in involving community leaders but there was still more to be done:

> *"Although we have already said that integrating these services with the community structures, I think apart from the ADCs alone, since this time we are talking of the devolution, it's important that the councillors, even everybody involved at the council level should take a part so that when we talk of a community structure, we are talking the same language".*

Another commented on the need to strengthen the collaboration between reproductive health and EPI programmes:

"I think it is a matter of team work and collaboration between these two departments or programs, the EPI as well as the FP-RH program. If there is that team work, I think there will be no any challenge. That team work should even start at the national level; the EPI unit as well as RH unit also there working together as well as the district level. At the district level, there is no problem because we are all under DHO but sometimes, at the national level, you find that the director of RH unit is doing on her own and the program manager-EPI is doing the other. So sometimes, you see at the national level, they are not collaborating"…."The reproductive health unit when they are organizing the meetings, they should also be inviting the EPI office because we have attended review meetings but nobody from EPI was available".

Another manager commented:

"I think it is a matter of team work and collaboration between these two departments or programs, the EPI as well as the FP-RH program. If there is that team work, I think there will be no any challenge"

The current reporting mechanisms were perceived to be weak needing some improvement. Some participants observed that HSAs only report on the commodities but do not include participant statistics as part of their reporting system.

"Mainly what should change is the reporting system on how can be sending reports on this integration… Depo Provera is found on the C stock that the HSAs send through phone but they are not able to send the clients (numbers of clients they have seen) they have found. So what can change, maybe part of the phone reporting if they can be sending the clients. Maybe if we can find a way that when sending the products, they should also send the clients whom they have contacted so that we should have the data."

In addition the referral system between family planning and immunization services was also perceived to be weak. Participants reported that not all service providers refer clients for other services.

"What is needed is that we should find a means to enhance the referral system within the integration. If we find that means, it will be easy; everyone will be able to refer because we see that some refer, some do not refer but we cannot tell as of today why some refer and some don't refer but if we can sit down learning from those who don't refer we should know their problems. When they say their problems we can learn from them".

Some participants observed that although referral slips were introduced, some of the service providers did not know the use of the referral slips.

> *"My perception is that we see people coming from immunization room to family planning room with a referral slip but from family planning to immunization room… because these family planning providers, they are not oriented on why we are using the referral slip. So what has changed is that yes, we see people sometimes; not every child but we see people coming with their referral slips from the immunization room but for us it's less because most of us we don't know where this started from, what is it that we are supposed to do? Yah".*

Training of service providers was another area where participants felt requires improvement.

> *"HSAs attending a single training cannot be assumed as them being competent enough to offer these services so we need to have refreshers as part of their motivation to maintain this program. That is another change that can be done for things to progress because they are real HSAs so they need to be mentored from time to time"*

Several interviewees further suggested adjustments in logistics

> *"I think they should be adequate transport especially to the HSAs, either motorbikes or pushbikes. The motorbike can be given to at least one to every facility and other HSAs can be provided with a push-bike".*

One of the participants suggested that strong leadership is important to make sure that all facilities are covered with personnel who will be able to provide integrated services to community. The participant felt that adherence to recruitment policy was key to reducing the disparity in staffing levels that exists between hard to reach areas and those close to towns

> *"Human resource just needs our government to be pro-active and train more HSAs and deploy them in the most especially hard to reach areas and I again sometimes we have the HSAs but they opt to stay in towns. So as managers, we really need to be strong enough and abide by the deployment policies and maybe there should be some laws attached; the HSAs should be in a position to abide by the staffing and deployment norms. If they say "Go to Kasonga, he or she should be able to go to Kasonga and not saying am not going to Kasonga simply because of this and that". This is so because when one is applying for a job, is ready to be deployed wherever. But now after being deployed, HSAs are given a chance to choose. That is why some areas do not*

have full time HSAs. So at least those deployment issues must be abided by. Managers must be strong enough."

Some participants felt that there is need to provide more IEC materials to HSAs to aid them in the delivery of IEC to women who were accessing family planning especially who were doing it for the first time.

" those charts [IEC materials]. For example, I'm an initial client and I have come for the first time to access the services, I'm really supposed to be educated and told what is that method and how does it work and its advantages and disadvantages and the contraindications, what I'm supposed to do. All that information is included in the charts and unfortunately, some HSAs have no chance. So this should be added on the challenges; IEC materials".

The same participant continued

"resources should be available, for example, the charts used during family planning because during supervision, I have remembered that some HSAs had no tools"

SUMMARY OF THE FINDINGS

The findings of this study show that integration of family planning and immunization is being implemented in Dowa and Ntchisi districts. Huge benefits of the integrated approach including improvements in the way family planning and immunization services are being provided; more women accessing family planning and children completing their immunization schedules; more information on the benefit of the two services to women; reducing the poor maternal indicators as reported by some participants; preventing unwanted pregnancies and saving up time that is used for other activities on both client and provider side have been reported. However, the definition, understanding and implementation of integrated services seem to differ between some health workers and clients but also at the level of the facility (district versus health center versus outreach). At the level of clients who are women with children under the age of one; integration seems to mean being able to access both services in one day while at the level of health providers mostly community Health Surveillance Assistants, integration seems to refer to having one person provide both services or sometimes having both services provided at one place. The variations in the meaning of integration were also evident at the level of service delivery. For example, at outreach, services seem to have already been integrated (before introduction of integrated services program) as everything has been provided in one place before introduction of integrated services while in health facilities; it was unclear on the model of integration that was being used and how providers understood it. This could somehow be attributed to the lack of a clear model of the integration of the two services that is being practiced in the two districts. For example, although some health workers mentioned that the two services are provided on daily basis, there were some who mentioned that some women were turned back because they reported on a day the services were not provided more especially in health centres. There were differing views between providers and clients on how referral of clients from one service to the other was being done. Service providers reported that a client is escorted and referral information is either delivered verbally by the one escorting the client or written on a referral note while clients (women) reported that they go on their own and sometimes without any referral notes.

Several benefits have been highlighted by all participants. The most commonly mentioned is time where majority of participants felt integration of the two services saves on time as women no longer go to the health facilities twice to seek either of the services and providers no longer have to attend to the same client on two different days to provide the two services. On the other hand, time was also mentioned as a barrier to accessing these services by a few women who felt that they were waiting for too long to get a service after being referred to either family planning or immunization.

Shortage of staff, inadequate contraceptives and vaccines, and lack of supervision were some of the challenges participants cited as affecting implementation of the integrated approach.

Of note is that most suggestions for moving forward were mentioned by family Planning referral refusers while most vaccination and family planning referral acceptors thought everything was going on well with no areas requiring improvement.

Integrated services seem to have more effect on family planning services as it has increased the demand of services. However, participants felt it was not easy to meet this demand as facilities run out of commodities. Other challenges included lack of facilities for maintaining the cold chain for vaccines, as most fridges are not functional.

PROPOSED PROGRAMMATIC RECOMMENDATIONS

1. Integration is being implemented in the two districts but there is clear evidence that providers are not consistent in the way they implement the approach, as other facilities seem to be following and others not. There are also some inconsistencies regarding perceptions of the impact of integration of FP and EPI. There is need for close monitoring on how these services are implemented.

2. Both providers and clients would like to see the approach continue and scaled up. If this is to happen, aim at standardizing the integration model. This will not only lead to consistent implementation but also in effective evaluation of the approach

3. Documentation of referrals seemed not to be well defined. This could be due to the lack of a standard integration model that is being implemented. Supervision needs to emphasize on proper documentation and referral.

4. Although majority of both providers and clients felt that integration has helped to reduce the time spent on providing and accessing the two services respectively, some complained of waiting for a long time in order to received a service. There is need to improve on time by considering prioritizing clients who have come for both services but also improving on staffing levels to respond to the demand that has been somehow created by the program.

5. Some women mentioned of partaking in the cleaning and drawing of water for the health facility in order for them to receive the service. Although this appeared only once, there is need to make a follow up and address the issues.

6. Integration of the two services seemed to be well received by both providers and clients. As this approach is being considered for scaling up, the program should consider including more services in the approach such as community based maternal and neonatal health which is currently not part of the package.

7. In order to strengthen the approach, there is need for resources such as increasing number of staff, commodities, vaccines, adequate storage facilities, IEC materials and financial resources

8. In addition to ADCs, the program might consider involving other stakeholders such as councillors.

9. At national level, there is need to strengthen the collaboration between the Reproductive Health Department and the Expanded Programme on Immunization including conducting joint review meetings and Supportive supervision.

10. There is need for timely reports that are shared with all stakeholders as such reports rarely reach the national level.

11. The program should consider training additional HSAs in the integrated approach

12. Avoid stock out of any of the products for successful implementation.

CONCLUSION

As much as the integrated provision of family planning and immunization seem to have so many benefits, the program should consider focusing on the reported barriers and challenges for effective continuation and scale up.

REFERENCES

Spacing on Maternal, Perinatal, Infant, and Child Health: A Systematic Review of Causal Mechanisms. Studies in Family Planning. 2012; 43(2):93-114.

Cooper CM, Fields R, Mazzeo CI, Taylor N, Pfitzer A, Momolu M, et al. Successful proof of concept of family planning and immunization integration in Liberia. Global Health: Science and Practice. 2015;3(1):71-84.

High-Impact Practices in Family Planning (HIP). Family Planning and Immunization Integration: Reaching postpartum women with family planning services. Washington, DC: USAID; 2013 Jul. Available from: http://www.fphighimpactpractices.org/resources/family-planning-and-immunization-integration-reaching-postpartum-women-family-planning

Moore Z, Pfitzer A, Gubin R, Charurat E, Elliott L, Croft T. Missed opportunities for family planning: an analysis of pregnancy risk and contraceptive method use among postpartum women in 21 low- and middle-income countries. Contraception. 2015;92(1):31–39.

National Statistical Office (NSO) [Malawi] and ICF. 2017. Malawi Demographic and Health Survey 2015-16. Zomba, Malawi, and Rockville, Maryland, USA. NSO and ICF.

WHO vaccine-preventable diseases: monitoring system. 2016 global summary. Retrieved from: http://apps.who.int/immunization_monitoring/globalsummary/estimates?c=MWI.