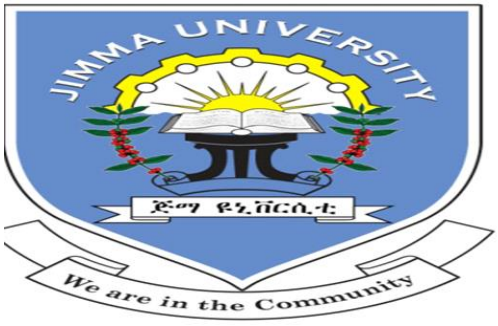

Evaluation of Growth Monitoring and Promotion Service Implementation at Health Posts of Debatie District, Benishangul Gumuz Region, Ethiopia, 2018.

An Evaluation Thesis Submitted to Jimma University, Institute of Health, Department of Health Economics, Management and Policy, in the Partial Fulfillment of the Requirements for Master of Science in Health Monitoring and Evaluation.

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December, 2018

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Evaluation of Growth Monitoring and Promotion Service Implementation at health posts of Debatie District, Benishangul-Gumuz Region, Ethiopia 2018.

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Abstract

Background: *Growth monitoring and promotion (GMP) is the regular measurement, recording, and interpretation of a child's growth over time in order to counsel, act and follow up results. Despite in Ethiopia GMP used as one of the main strategies to end under nutrition and zero stunting by 2030, in Benishangul Gumuz Region the prevalence of under nutrition remains a serious challenge then stake holders suggested implementation of GMP need to be evaluated in Debatie district.*

Objective*: To determine the implementation status of growth monitoring and promotion service in Debatie District, 2018.*

Methods: *case study design, with both quantitative and qualitative data collection was used from March 15 to April 15, 2018. Dimension used for the evaluation were availability, compliance and utilization of GMP service. A total of 458 caregivers were included by simple random sampling. Moreover, 50 client-provider interactions were observed by consecutively, three month selected documents were reviewed and 17 key informants were interviewed purposively. Ethical clearance was obtained from (IRB) Jimma University. Quantitative data was entered in to Epi-data and Analyzed by SPSS. Binary logistic regression was used to identify determinants of adequate utilization. Qualitative data was analyzed manually and used to support the quantitative results. The overall implementation of the service was determined based on judgmental criteria.*

Result: *Resource availability was scored 71.4 percent; out of ten health posts, all of them had weighing scale, seven of them had adequate number trained health extension worker, none of the them had GMP guideline, 30% of them had no weighing bags and 40% of them did not have a child growth charts. Compliance was scored 56.26%; Triple A approach was not practiced for 80% of observation session, Moreover, as the judgment parameter the overall utilization of the service was scored 48.2. Growth monitoring service coverage was 73.95%, full immunization coverage was65.28%, Vitamin A supplementation coverage was 53.78%. Family size, care giver knowledge, care giver attitude, distance from the service area, and having child growth chart were significantly associated with adequate utilization of GMP services. This difference are supported by a qualitative finding of HEWs use inappropriate tools in GMP, irregularity of service, lack of pro motion for regular weighing session to mothers were mentioned reason*

Conclusion and Recommendation: *The overall level of implementation of growth monitoring and promotion program was judged to be poorly implemented. Therefore, adequate HEWS, and regular support supervision and full set of GMP materials must be present for GMP to be successfully implemented. And HEWs should follow the recommended triple-A procedures, and should cover all eligible children and required regular monitoring.*

Key words*: Growth monitoring and promotion, Implementation, Debatie district.*

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List of Abbreviations

CBN	Community Based Nutrition
EDHS	Ethiopian Demography Health Survey
GMP	Growth Monitoring and Promotion
HAD	Health Development Army
HC	Health Centre
HCW	Health Care Worker
HEP	Health Extension Program
HP	Health Post
HSDP	Health Sector Development Plan
MDG	Millennium Development Goal
NNP	National Nutrition Program
SUN	Scaling Up Nutrition
UNICEF	United Nation International Children Emergency Fund
WHO	World Health Organization

Operational definitions

Compliance: when the HEWs GMP performance activities completed according to set standards of GMP guide line.

Implementation status of GMP service: Means based on the judgment parameter the degree to which GMP services is being implemented if [≥80] which is refers Success fully implemented, if [70– 79] refers partially implemented, and if [< 70] refers to poorly implemented.

Adequate utilization of GMP service: if children who attended the program 50% or more sessions of their age (months).

Maternal attitude toward on GMP service: Based on the instrument used favorable attitude was implied when mothers are responding to greater than and equal to the mean score of the attitude variables

Maternal knowledge to ward on GMP service: Based on the knowledge questions they asked when mothers who score 0-5 for the knowledge questions implied poor knowledgeable, mothers who score 6-8 for the knowledge questions implied good knowledgeable toward on GMP service

Maternal satisfaction to ward on GMP service: Based on the instrument used satisfied was implied when mothers are responding to greater than and equal to the mean score of the satisfaction variables.

Care giver: refers mothers/family who were a main care provider for under two year child and who enrolled in GMP.

Triple A approach: to say the process is conducted with triple A (Assessed, Analysis, and Action) approach if HEWs no missed one of the steps in triple A which includes**: step1. Assessed:** When HEW measured weight of a child to determine how well the child is growing or not.**step2. Analysis:** when HEW ask the possible reason for adequate or inadequate growing of that child.**step3.Action:** when HEWs provide counseling based on individual child growth monitoring (GM) provides information.

Health facility: refers health posts which mean the level at which this evaluation was conducted**.**

Chapter One: Introduction

1.1 Back ground.

Growth monitoring and promotion(GMP) is the regular measurement, recording, and interpretation of a child's growth over time in order to counsel, act and follow up results with the purpose of promoting child health and development(1).In developing countries the main assumption benefits of working with GMP are reductions in under nutrition and mortality among young children. Other potential benefits are facilitation of regular contact with primary preventive services such as immunization status and vitamin A supplementation and referral services. GMP is an intervention that designed to affect family-level decisions for the nutritional outcomes of children(2).The primary objective of GMP is to determine inadequate growth early enough and undertake actions to prevent further faltering before the child reaches a status of under-nutrition(3).

In the national strategy also there are the basic principles of GMP Implementation which includes the GMP is implemented in health post run by HEWs. The GMP also used regular community dialogue with HDAs to influence behavior changes in child care practices and health-seeking behaviors. The Primary focused on monthly measurement of weight on children under 2yearassumingthatearly identification of malnutrition in this period can be reversible with appropriate nutritional interventions The GMP process includes three stages: I) measuring and interpreting growth adequacy, ii) analysis of the reasons for adequate or inadequate growth, and iii) counseling; which corresponds to the triple-A approach (Assessment, Analysis, Action)(2,3)

Malnutrition most often refers to under nutrition but the term can also encompass over-nutrition. Based on weight for-age measurement underweight is a composite measure of stunting and wasting and recommended as the indicator to assess changes in the magnitude of malnutrition over time(4).Ideally, a growth promotion program has the best chance to succeed if the following elements are present; full participation of mothers and families; guidelines for decision making are clear; individual counseling is provided, negotiated with caregivers. targeting the most vulnerable age group so allow time for counseling; link with health and community services, good follow up of the children needing it, effective monitoring and supervision, and a good planning and training of all relevant persons, including health extension workers, supervisors and the growth promoters prior to the initiation of the program(5).

1.2 Statement of the problem

To eliminate malnutrition and further reduce the child mortality rate much effort has been made in UNICEF. Then GMP is one of the main strategies used to prevent under nutrition and reduce child mortality. Even though UNICEF extended the implementation of GMP in worldwide the recent global nutrition report showed the progress to reduce under nutrition is not rapid enough to meet the 2025 target(6,7).

From all the united nation regions the children suffering with malnutrition are not equally distributed. Especially Africa is the only region where experienced slow or no progress in reducing stunting 2000 and 2016(7). In sub-Saharan Africa economic progress is being undermined by malnutrition which cost at least US$25 billion annually. It is estimated that stunted children earn 20% less as adults than non-stunted children do. Also the impact of stunted children today lead to stunted economies tomorrow, underweight children become underweight adults and the cycle of malnutrition is across generations(6).

Currently, the government of Ethiopia made strong commitments for achieving the key goal of Seqota declaration that stated to end under nutrition and zero stunting by 2030 through focus strategy on GMP intervention. However, still (45%) of child deaths are reported as associated with under nutrition(8). The rationality of focusing on children under2 year was assuming that it is (the window of opportunity period) for retrieve the child growth and development of country. Also, in order to address the highest prevalence of stunting and underweight, in Ethiopia UNICEF had been promised to increase resource allocations especially on GMP interventions for CBN scale up regions which include Benishangul Gumuz region (9). However, the EDHs 2016 report shows in Benishangul-Gumuz region the prevalence of under nutrition remained the highest which is reported (34 percent)of children were underweight and43% were stunted (10). But, in Seqota implementation plan the study estimates Ethiopia can reduce losses by ETB 148 billion by 2025 if it reduces underweight rates to 5 percent and stunting to 10 percent in children under five years (8).

Also, according to studies done in Metekel Zone of Benishangul-Gumuz Region there was the prevalence of malnutrition and low complementary feeding practices. Hence, they recommended the front line nutrition program operators needs to be evaluated to optimized efforts for improvement of child care practice(11,12).As UNICEF conducted review studies

on different countries GMP program mostly the failure of GMP for not achieving its intended outcomes has been identified as a several programmatic factors and implementation factors including low coverage and poor linkage of monitoring to promotion activities(5).

As one study conducted in Southern Ethiopia the proportion of children who utilized GMP service were low(14).However, mothers understanding and their perception toward attending regular growth monitoring may be associated this low result. Also, as the UNICEF study being indicated that without standing the implementation of GMP like coverage within communities, linkage of Growth monitoring with promotion activities the findings of GMP outcome (utilization itself) would not be lead program improvement. So, recently questions have been raised from stake holders about whether growth monitoring and promotion is not being implemented as it was intended. Furthermore, they raised questions of why and how GMP service do not work (or work). From the final evaluation finding report also they need to identify operational barriers that preventing a good performance and to analyses the constraining factor store form the mechanisms of action for service development.

1.3 Significance of the Evaluation

The finding of this evaluation helps to determine implementation status of GPM service. It is significant for program managers; to notify whether or not the intervention is being delivered according to the designed mechanism of action to meet the objectives, to notify operational barriers that preventing a good performance and strategies to overcome those barriers, to re-design the mechanisms of action. For service providers: to identify the constraints, create the enabling environment and contribute for learning lesson. For the community: GMP session would conducted as near as possible to people's homes; at a time, convenient to parents then frequent intervals brings the child into contact with the health services timely. For Researchers: It would be used as base line data particularly for anybody who needs to conduct outcome evaluation.

Chapter two: program Description

2.1.Stakeholder analysis

In order to ensure that the evaluation leads to action to address the problem most important stakeholders were identified from the beginning of evaluability assessment. Stakeholders include those who need the new knowledge that will be provided by the research, those who operate the service, and those who will use the results of the research and with those for whom the services are provided.

The discussion was held on their role in the program and in the evaluation process.
Evaluation questions that the stakeholders needs were agreed. The stakeholders play role in program is listed in stakeholder analysis matrix.

Table 1: The stakeholders' analysis matrix evaluation of GMP service implementation in Debatie district, 2018.

Stakeholders	**Role in the program**	**Perspective/interest in evaluation**	**Role in evaluation**	**Engagement strategies**	**Level of Importance**
Benishangul Gumuz Region of Health bureau	✓ Delivery protocols, guidelines ✓ Coordinate partnership with NGO ✓ Provides technical support	✓ To know the level of implementation status &the gap in service delivery	✓ Defining the problem, revise evaluation question, indicators criteria ✓ sponsor to the evaluation ✓ monitor evaluation process	✓ Telephone ✓ E-mail ✓ Formal letter ✓ Face to face	High
Metekel Zone Health department	✓ Planning , monitoring & evaluation ✓ Support training and supervision ✓ Resource allocation	✓ To know the gap & how well run GMP	✓ Define the study area ✓ Selectevaluation questions ✓ Establish criteria	✓ Telephone ✓ Face to face ✓ Formal letter	High
DebatieWoreda Health Office	✓ Plan for GMP activities ✓ maintenance of equipment ✓ Supportive supervision, training ✓ Monitoring & evaluation	✓ Use evaluation findings for program improvement	✓ Select the evaluation questions & indicators, ✓ Describe the Program ✓ Serving as source of data	✓ Formal letter ✓ Telephone ✓ Face to face	High
Health extension workers	✓ planning, Carry out GMP activities, ✓ Hold meeting within community. ✓ Refer and record keeping ✓ Report to the districts	✓ Solution for the constraints $gain enabling environment	✓ Serving as source of data	✓ Face to face ✓ In-depth interview ✓ Telephone	High

HAD leaders	✓ Community mobilization ✓ Share program information ✓ follow up children as needed ✓ Identify new born& enroll in GMP	✓ To get public recognition $ by those in authority	✓ Source of data for evaluation	✓ Face to face	HIGH
Kebele administration	✓ Participate in planning& mobilize the community, Organize venue and Monitor the program.	To know mothers` program perspectives	✓ Facilitate to the data collection process	✓ Face to face ✓ Telephone ✓ Formal letter	Medium
Beneficiary(Caregivers)	✓ Service utilization.	✓ To get service as near as possible& at a time/date convenient to them	✓ Source of information to the data collection	Face to face communication	High

2.2. Expected program goal and objectives

Goal: To contribute to reduction of morbidity and mortality that related with malnutrition among under two year children in Debatie district.

2.2.1. General objective of the program

Prevent and reduce underweight (who fall below-2 SD) among children 0-24 months of age through regular growth monitoring and promotion.

2.2.2. Specific objectives of the program

1. To achieve the GMP service coverage at least 80% of children under two years in the district at the end of 2018year,
2. To achieve at least 80% of children whose growth is monitored adequately (attend at least 50% number of visits per a child birth) at the end of 2018year.
3. To achieve 100% of identified children who has not gained weight for three consecutive visits have referred with medical/nutrition center at the end of 2018year.
4. To achieve at least 95%of among children (6-23) age months who participate in GMP will not missed one or more dose of vitamin-A supplement at the end of 2018year.
5. To achieve at least 91% of children (12-23) aged months who participate in GMP will have full immunized at the end of 2018year.

2.3. Major strategies

- Build the capacity of HEWs and HDAs (1-5 networks) on GMP activity.
- Assessing HEWs at the health post level to coordinate GMP activities by having the right number of people with the right competencies in the right place at the right time.
- Building on good practices and removing constraints and discouraging practices which are detrimental for sustaining GMP.
- Provide appropriate information and adequate support to mothers/care takers where GMP is make possible to them there option successfully carried out.
- Provide adequate access of child health card to satisfy the needs of all health post at all times throughout the months.

- ❖ Hold meeting with village HDAs leaders to discuss the reasons for the low attendance rates and to tell them the benefits that can be gained from participating in the GMP service.

2.4 Program Components

Program input/resource

The required resource for the implementation of GMP service

- ✓ Number of trained HEWs on GMP
- ✓ Number of recruited HDAs leaders in HP catchment area
- ✓ GMP tools (weighing scales, Weighing Bags,)
- ✓ supply system of children's health card
- ✓ GMP implementation guideline
- ✓ Record-keeping materials (registers, monthly reporting formats)
- ✓ Technical support /supervision in placed

Activities of the program

The activities in implementation of GMP includes

- ✓ Conducting regular growth monitoring through triple A(assessment, analysis, action)approach
- ✓ Conducting GMP session through monthly scheduled
- ✓ Conducting regular community dialogue session with HDAs leaders
- ✓ Deciding follow up on growth faltering or for next return visit
- ✓ Regular use of checking the child immunization status &vitamin A supplementation
- ✓ Referring a child who has lost weight for three consecutive months.
- ✓ Monthly growth recording and reporting to indicate the month's activities.

Output of the program

The expected output from implementation of GMP in the study area includes

- ✓ Counseling sessions conducted with through (triple A) approach
- ✓ Number of observed sessions informed about next turn visit
- ✓ Number of GMP sessions conducted on monthly basis
- ✓ Regular community conversation sessions were conducted with HDAs leaders

- ✓ Regular checking of children immunization status &Vitamin A supplementation was performed
- ✓ Number of identified children who has lost weight for three consecutive visits were referred to medical/nutrition center.
- ✓ The child growth chart were used to record the growth status of child
- ✓ Monthly reports were sent on the reporting periods

The outcome of the program includes

- Increased care givers awareness on GMP
- Increased utilization of service
- Improved childcare practice
- Increased full immunization & micronutrient status

Impact of the program

- Improved optimal growth
- Improved nutritional status
- Reduced child morbidity & mortality

2.5. Logic-model-for- GMP-service-in Debatie district**2018**

Statement of the problem: Despite GMP is one of the main strategies used in Ethiopia to end under nutrition and zero stunting by 2030,in Benishangul gull Gumuz Region the prevalence of under nutrition remains a serious challenge then stake holders suggested implementation of GMP need to be evaluate in Debatie district(10)..**Goal:** Contribute to reduction of morbidity and mortality of under two years children related with malnutrition through implementing GMP service.

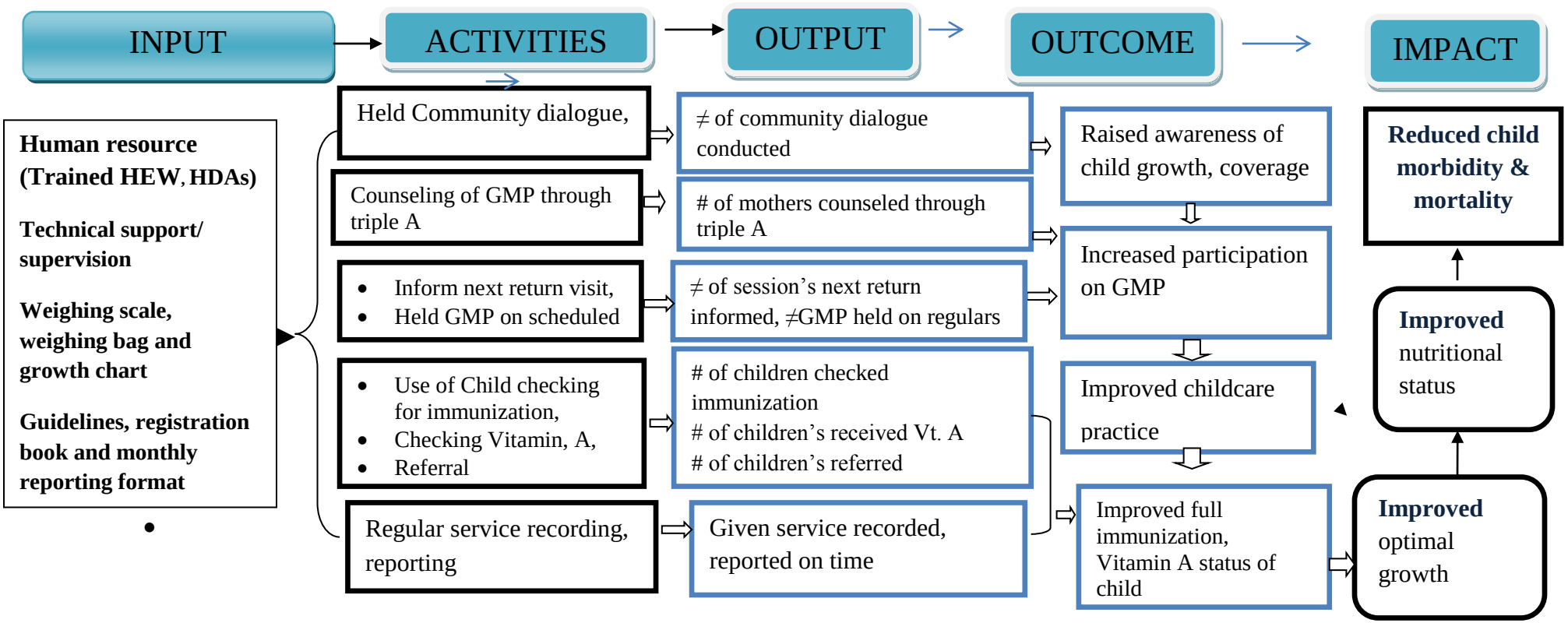

Figure 1: Logic model for implementation of GMP service in Debatie district in 2018

2.4. **Stage of Program development:**

Growth Monitoring (GM) was starting from early 1970 has been promoted as one of the key components of community nutrition program. In the 1970s growth monitoring has been implemented in several developing countries include Africa. But, several studies have shown growth monitoring without any action would not be effective in improving child nutrition status Therefore (WHO, 1986) introduced the term GMP to make growth promotion an explicit component.

Also, in 1990 the effectiveness of GMP has been questioned mostly due to problems in implementation including low coverage and poor linkage of monitoring to promotion. Then, UNICEF in September 2007and in(June 2008) identified gaps in implementation and refines the program design aspects. At this meeting experts were reaching consensus on the definitions, outputs, outcomes and a conceptual distinction between GM and GMP. Also, they were listed the highest priorities area for implementation and evaluation of GMP to answer technical questions with regards to effective GMP. Participants at the June meeting of experts consultations came from different country include (Ethiopia, Honduras, South Africa, and Nepal).

In Ethiopia GMP was initiated in 2008 in 39(districts) as one of the key components in the community based nutrition package. by the end of 2014It was expand to a total of 447 woreda in six selected regions including (Benishangul Gumuz region),by considering to address the highest stunting and underweight prevalence rates in Ethiopia through support of UNICEF and development partners(15).

Despite the several study evidence shown GMP has a potential impact to reduce child malnutrition when it is appropriately done. As the Recent study finding shown that under nutrition is remains the highest prevalent in Debatie district. To determine the type of evaluation first during EA seen the conditions GMP service as pre mature for conducting outcome evaluation because the implementation level of GMP service has not been evaluated. Also, experts suggest that to consider the program maturity it is expected five years of implementation. As a result, stake holders together with principal evaluator determine implementation of GMP service need to be evaluated (23).

Chapter 3: Literature Review

3.1. Availability Dimension.

The GMP guideline suggested growth promotion program has the best chance to succeed if the following elements are present such as the adequate number of growth promoters present, when they are trained in GMP and equipped with a set of tools, guidelines for decision making are clear, the set of counseling cards and frequency of supervision visits in placed(5).As the health system of Ethiopia FMOH guided in order to reduce maternal and child mortality through improve the implementation of health extension program on community level intervention each HP should staffed by two female Health Extension Workers (HEW). Structure health development armies need to be organized (1HDAs leaders per 30 HH).this is the range of program for power of regular contact inputs to behavior change and potential impact on child nutrition (15).

According to the expert's consultation made on the GMP implementation strategies, the practical sessions of GMP should be supervised in monthly to coaching good counseling skills, to correct mistakes that they made in their registers and to motivate the growth promoters to do their work well(13). The common problems or constraints encountered in child growth monitoring program in (4 countries, 25.0%) were tangible constraints include poor condition of weighing scales: lack of maintenance standardization and timely replacements and lack of adequate training of personnel (reported by the in 6 countries, 37.5%)(17).

In order to address prevalence of stunting and underweight, in Ethiopia, UNICEF had promised to increased resource allocations especially on GMP interventions for affecting regions which include Benishangul Gumuz region to address (the highest stunting and underweight rate prioritized on CBN scale upped regions). According to study done on ICCM quality of care and adherence in Benishagul-Gumuzregion, out of (217 HPS) only 55.8% of HPS available equipment with weighing scale for children. These is implausible to the aim of promoting growth (18). According to USAID' study done on existing nutrition-related materials, in Ethiopia April 2011the gaps observed at various level such as(HEWs) do not receive sufficient training on the proper use of different support aids by counseling cards, Post-training supervision is not continuously available, the lack of a nutrition information system, Protocols and guidelines are not available in health facilities at various levels(19).

As Benishangul Gumuz where the higher percentage (89 %) of the Woreda offices had a sufficient copy of written guideline for reporting of routine data to the next reporting system .but, with reverse whereas the lower percentage or only (28 %) of Woreda had trained staff to compile report data(20).For successful of GMP implementation Ethiopia during the expert's consultation made consensus on the practical sessions of GMP need to be supervised in monthly: to coaching good counseling skills, to correct mistakes that they made in their registers and motivate the growth promoters to do their work well(13). As one qualitative study finding of Ethiopia reflects the implementation of community based nutrition programs (CBN) have been hold back by lack of training from both HEWs and HDAs, work load for HEWs, lack of close supervision, shortage of some materials and supplies and lack of incentives for HDAs(21).

3.2. Compliance Dimension.

As UNICEF conducted review of GMP implementation evaluation in deferent country, the primary reasons for unsuccessful GMP in most country programs were due to lack of deal with GM information to analyze and to take actions on the GMP session. Also the review finding concludes demand for growth monitoring can only be created by a process of dialogue(22).

Based on the experts' consultation made to guide the way for ward of GMP implementation they set the following recommendations: When GM information is not used to inform the education and promotion element of an intervention is not GMP, The primary focus for monthly measurement is children under 2 as they are Critical age; GMP requires the regular monthly contact and follow-up of the growth in the under-two children linked with appropriate counseling, Weight measurement should be maintained, because it is the most sensitive indicator of growth faltering, measurement of MUAC should not be part of GMP but could be used as a screening tool to identify acutely malnourished(13).

Also the GMP guideline recommended for the GMP success; counseling should tailored by (triple –A) approach, during GMP session growth chart should be used, every child seen every month should be given return visit. During every GMP session a child should always check Vitamin A supplementation and immunization status(5).

As finding of study done in Ghana showed growth promoters were followed the counseling procedures that recommended by UNICEF. Also, weight recording on the growth chart were properly carried out for 97% children's(23). A Community-based GMP evaluation study in Uganda showed that, all the triple approach was conducted for 75% of counseling sessions. For about (70%) of children's their immunization status was cheeked and refer were done to the nearest health center for vaccination. In addition, from all assessed districts, averagely 72% of them were used counseling card as a tool. Also, all caregivers were informed of the next date of visit(3,24).

GMP implementation guideline suggests that the success or failure of GMP depends on how the information and the chart are used. Growth promoters should use a child health card as a key tool to track the growth of the child at monthly weighing to visual aids and communicate about child growth trends with care givers. It should be recorded and given for each child immediately after birth. then health workers expect to explain the importance of the children's clinic card(5).

GMP guideline suggested that, every child who has not gained weight for 3 consecutive months were expected to referred to medical care or nutrition center. study done South Indian villages from all children who did not gain weight for 3 consecutive months were referred to nutrition center. Regular GMP sessions should held on a fixed schedule set by mutual agreement. It should be convenient to most members of the community these help families are more likely to involve in the regular session(5,22)

The community Based Nutrition Program (CBN) suggested HEWs expect to conduct regular (monthly) community conversation with HDAs (1-5 networks) leaders. Also the program should make nutrition as a priority agenda for families to influence behavioral change of health seeking behaviors for child care practices (15).As the revised national Ethiopia HMIS (2017) proposed the monthly GMP service records and activities need to be reported with in schedule of a given reporting period and 90% is a minimum level of acceptable timeliness The wide variety of knowledge and skills acquired by nutrition workers together with other factors of their motivation can be strong determinants of program success(3,25)

Ethiopian National Nutrition Program Baseline Survey Report for access of mothers to nutrition information from Health Extension Workers (HEWs) and Voluntary Community Health Workers (VCHWs) twenty four percent of care takers have never contacted HEWs in the past six months before the survey(26).

3.3 Utilization Dimension

Coverage and participation on GMP

As the evaluation of GMP review programs finding conclude that another key operational factor that contributes for the success of GMP were connected with achieve high coverage for all children in the catchment area and ensure consistent contact with children. Based on the Program review evaluations, the benchmark of GMP implementation assumed to be effective when the service coverage achieved at least 80% of children in the catchment area. Similarly, any given child should participate at least 50% of the visit time per their age of months or (each child should have growth assessed at least half of visit time per their months)(2).

According to the finding of the study done on south Africa showed that the extent of GMP service coverage were reached for 90% of children, among them 70% of children under two years were met the minimum requirements or attended the adequate growth monitoring sessions(27).

As the GMP program experts suggest that in order to effectively achieve healthy growth of children increased coverage of children who complete full immunizations and vitamin A supplementations are expected in GMP intervention(2).According to the national HSTP1 plan 91% is the target to be reached with full immunization coverage, and also 95% is the target to reach by vitamin A supplementation coverage assume that can be reduced child mortality by 23% (28).

But, according to 2016 EDHS findingonly57% of12-23 month's children have been fully vaccinated in Benishangul Gumuz regional level. also, only 38% of among children age 6-23 months rich in vitamin-Ain Ethiopia this is remain low from 2011 EDHS finding among infant young children(29).

3.4. Factors that associate care givers pair their children utilization of adequate GMP session.

Socio Demographic Factors

According to the result finding of study done in Ethiopia child utilization of growth monitoring and promotion services has associated with the participants socio-demographic characteristics of maternal age, maternal education, family size and health card utilization(14).The most common reason for not attending GMP program was a belief that the GMP program would not be helpful to the child (36%), absence of a nearby program (52%).Because of knowledge on the program 85% of participants' care givers bringing the child to the GMP program(30).

Study conduct on Indonesia show that Respondents satisfied with GMP services were more likely to attend than those who were dissatisfied. Approximately 50–55 % of the mothers who have favorable feeling (positive attitude, satisfied) towards GMP were intended to attend every month. But, those who have with unfavorable feeling(negative attitude, dissatisfied)were mentioned the main reasons for not attending GMP(30).

According to Ethiopia study care givers Knowledge and attitude toward on GMP showed the overall knowledge and attitude of mothers to ward on GMP service found as low. Which is about53% of mothers was found to have poor knowledge and 42.6% of mothers had poor attitude. This result may determine by the context of GMP service implantation level (31)

Also, in order to encourage care givers participation on regular GMP session GMP guidelines fixed an operational rule that GMP need to be conducted as near as possible to people's homes; a time be convenient to parents; in small enough groups to allow short waiting and adequate individualized dialogue, be conducted in a way mainly to suit parents not health workers. Show respect to the family and take particular care not to offend, regular GMP sessions should be conducted on a fixed schedule, weighing area should be comfort for them(5)

As the operational rule of GMP session suggest that, in order to increase the intensity of regular participation health extension worker should take adequate time to talk with each mother (at least 5-15 minutes) and conduct regular GMP session as near as people's homes, with in30 minute of walking time distance from their home. Being living closer to a health facility were found statistically significant associated with higher utilization of ICCM services(18).

As the evaluation study done on the nutrition support program in 2012 of Ethiopia, concluded that the frequency of contact (at least 2 times contact in 3 months) HDAs with community had potential increase coverage of interventions and a substantial change on behavior. Also, the finding showed the care givers Possession of her child health card were significantly contributed for increased participation from 22% to 41% ($p<0.001$) in tranche. As the EDHS 2016 result finding showed only 34% of children age 12-23 months found a child cards(29,32)
According to one qualitative study done in southern Ethiopia showed that the reason for missing of the GMP sessions were Health extension workers did not tell the exact time of GMP session to mothers/caregivers, workloads of mothers/caregivers and child ages not reached to be weighed were mentioned as reasons(14).

According to one qualitative study finding in Ethiopia described that the problem for not following growth monitoring has various challenges include mothers were lack of awareness in mothers about childhood malnutrition and GMP program, and lacks of well-organized regular supervision were mentioned (33).

Conceptual framework:

In summary, the conceptual framework used to measure the adequacy of utilization status of care giver with their children to ward on attending on GMP services was depicted in figure below. It was adopting by referring international guideline, national guideline and previous literature conducted on the GMP.

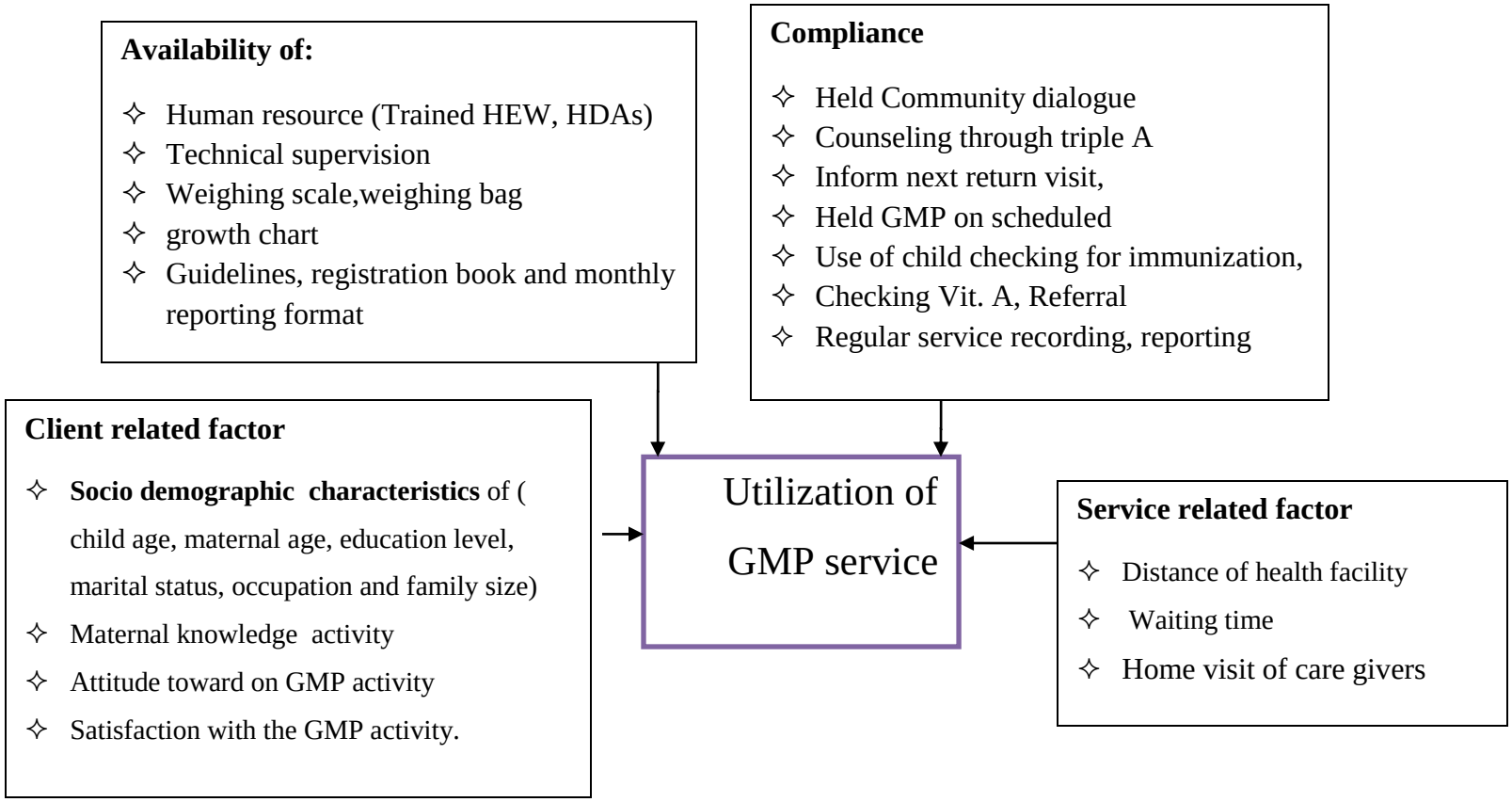

Figure 2 Conceptual framework for Utilization of GMP service, adapted from different literatures (45).

Chapter Four: Evaluation Questions and Objectives

4.1. Evaluation Questions

1. Are the required resources available for implementation of GMP service? If yes how? If not why?
2. Is the service being implemented according to GMP implementation guidelines? If yes how? If not, Why?
3. Do the children utilize adequate growth monitoring session? If yes how? If not, Why?
4. What are the factors associated with utilization of growth monitoring sessions?

4.2. Evaluation objectives

General Objective

To determine the implementation status of growth monitoring and promotion service in Debatie district, Benishangul Gumuz Region, North WestEthiopia2018.

Specific Objectives `

1. To assess availability of the required resources to provide Growth monitoring and promotion service.
2. To assess the compliance of HEWs to guideline while implementing the GMP service.
3. To determine the utilization level of children whose growth is monitored adequately.
4. To identify the associated factors for utilization of GMP services

Chapter Five: Evaluation Methods

5.1. Study Area

The evaluation study was conducted in Debatie district, Benishangul Gumuz regional state of Ethiopia. The Woreda is located from north western with 547km far away from Addis Ababa (that is capital city of Ethiopia). According to the Woreda health office report the total population is 91,583. From which the estimated under two year children is5, 412. The Woreda comprised with29 kebele, 31 health posts and four health centers. The growth monitoring and promotion (GMP) service of less than 2 year children take place at HP level. It is one of the monthly reportable activities through operated by HEWs.

5.2. Evaluation Period

Evaluability assessment was conducted from November 15/2017 up to December 10/2017 and evaluation was conducted from March 15 to April 15, 2018.

5.3. Evaluation approach

Formative evaluation was used. Since, it was conducted for the purpose of program improvement. This was guaranteed by agreement reached on during evaluability assessment and the participation of stake holders throughout the evaluation process.

5.4. Evaluation design

In this study Case study design with both quantitative and qualitative data collection methods was used to evaluate the implementation status of GMP service in Debatie district. This design was used because to offering a more complete picture of what happened in the program and why. It also helps to investigate how a particular operation units are being implemented the GMP service. Also, a complete case study report will have a detailed picture of the contemporary real- life context relies on multiple source of viewpoints (34).

5.5. Focus and Dimension of evaluation

5.5.1. Focus of evaluation

The focus of evaluation was mainly on process of GMP service to distinguish where and how they can be improved for the successful of GMP intervention. And, it also considers some outcome indicators (regard to utilization of adequate growth monitoring, extent of full immunization and vitamin A supplementation) .To assess whether or not the intervention is being delivered in the predetermined order and amount because stake holders particularly wanted to know the whether the variability of these service provision on the operation units (HPs) to take remedial actions from the program operation system.

5.5.2. Dimensions of Evaluation

The dimensions of this evaluation were: Availability of resource, compliance of HEW to the guidelines, client's utilization of GMP service.

5.6. Indicators/variables

Availability indicators

1. Proportion of HPs with at least two trained HEW on GMP
2. Proportion of HPs in which sufficient (1HDA per 30HH) HAD leader's existing.
3. Proportion of HPs with functional Weighing scale in the month of study period.
4. Proportion of HPs with weighing bags in the month of study period.
5. Proportion of HPs having GMP implementation guideline.
6. Proportion of HPs no stock out with child health card supply in the last 3 months.
7. Proportion of HPs having GMP registration book.
8. Proportion of HPs having GMP service reporting format in the last 3 months.
9. Proportion of HPs in which regular supervision received from HC at least three times in the last 3months.

Compliance indicators

1. Conducting regular growth monitoring through triple A(assessment, analysis, action)approach
2. Proportion of care givers who informed for follow-up or next return visit
3. Proportion of children checked vitamin- A supplementation status.

4. Proportion of children checked immunization status.
5. Proportion of observed sessions at which utilized child's growth chart to record weight of a child.
6. Proportion of children identified with SAM/who has lost weight for 3 consecutive visits referred to medical/nutrition center in the previous three months.
7. Proportion of HPs in which GMP session conducted through regular fixed schedule that set by mutual agreement of the community members in the previous three months.
8. Proportion of HPs in which monthly report sent within required reporting periods in the previous three months.
9. Proportion of HPs in which at least three community conversations conducted on the nutritional status of Children in the previous three months.

Utilization indicators

1. Proportion of HPs reached GMP service coverage at least 80% of under two year children's.
2. Proportion of(0-23) months children whose growth is monitored adequately or attend at least 50%or more number of visits from birth of a child months.
3. Proportion children age of 6-23 months who participate in GMP who had not missed the last six-month vitamin-A supplementation.
4. Proportion (12-23) month children who participate in GMP who were fully immunized

Dependent variables

Utilization of growth monitoring service

Independent Variables

Socio demographic characteristics of the care givers (Age, Education Level, marital status, occupation), care givers attitude**, c**are givers knowledge, care givers satisfaction toward on GMP service, and Service related factors **(**distance from weighing session, waiting time to get service, home visit).

5.7. Populations and sampling

5.7.2. Source Population

All caregivers with 0-23 month's child in Debatie district, all GMP service documents, all HEWs and HDAs who are working in GMP, nutrition focal person and Cluster coordinators in the Woreda

5.7.3 Study Population

Sampled caregivers with 0-23 month's child in Debatie district selected HEWs and HADs leaders, selected GMP Program documents and Woreda nutrition focal person and cluster coordinators.

5.7.4. Study Unit

Caregivers/Mothers who gave information about their children 0-23moths, individual HEW and HAD leaders, HEW supervisor, cluster coordinators and program document were the study units.

4.7.5. Unit of analysis

The primary unit of analysis for this study was care givers, health posts and observation sessions. Whereas, the final unit of analysis (secondary unit of analysis) was implementation status of GMP service in Debatie district

5.8 Sample Size determination and sampling Technique

5.8.1 Sample Size determination

For care givers interview

Single population proportion formula was used to compute the sample size for house hold survey by taking proportion of GMP services utilization for children 0-23 months old P=16.9%(14). It was taken from previous study conduct in Southern Ethiopia on program Utilization of growth monitoring and promotion services and associated factors among under two years of age children. Standard error considered to be d=0.05 at 95% confidence interval and design effect of 2.

$n = \frac{(\mathbf{Z\alpha/2})\mathbf{d^2P(1-P)}}{d^2}$ $n = \frac{(1.96)^2(0.169)(0.831)}{(0.05)^2}$= 432

By considering 10% non-respondent rate and the total sample size gives n= 432+44= 476

Direct observation:

Determination of sample size for observation session was used from earlier GMP program review experience study in Uganda that developed for the purpose of evaluating GMP programs(23).Also WHO recommended for evaluation of counseling skills three to five sessions need to be observed at each counseling site(35). In line with this in this study, from each health post one HEWs was observed for seven observation sessions. The first two observations was neglected to minimize the Hawthorne effect. So, totally, 70 observation sessions were conducted from this,**50** observation sessions was employed for data analysis).

Key informants interview: Totally**17**key informant interviews were conducted. Based on their specific role in GMP and data saturation**:** One district HEWs supervisor, four cluster supervisors, six HEWs and six HAD leaders were interviewed.

Document review

As the Evaluation Guideline stated to evaluate the implementation of GMP activity measure the last 3 months existing data are desirable for data requirements of evaluation. For service coverage the expected number of children were used at the existed registration data from each HP(36).

Resource inventory: The number of HPs was sampled based on the WHO recommendation for selecting HPs in the district. it is suggested to select three health post at random from nine number of HPs in the district which is large enough(37)**.** In line with this totally ten HPs were selected to assess whether the resource needed for GMP session are available. According to the designed guideline of GMP evaluation and WHO recommendation for the assessment of the existing data and supervisory visits report the information of the past three months data can be used where is not complete or non-existing the desired data (37). In line with this to assess re supply of recording materials and regularity of supportive supervision the last three months data were used.

5.8.2 Sampling technique

Allocation of study participants to each selected HPs was done using proportional allocation based on the total number of children aged less than two years. From health extension workers registration book Study participants were identified by Simple random sampling. Specifically computer generated random numbers was employed to select eligible subjects.

Sampling procedure/technique

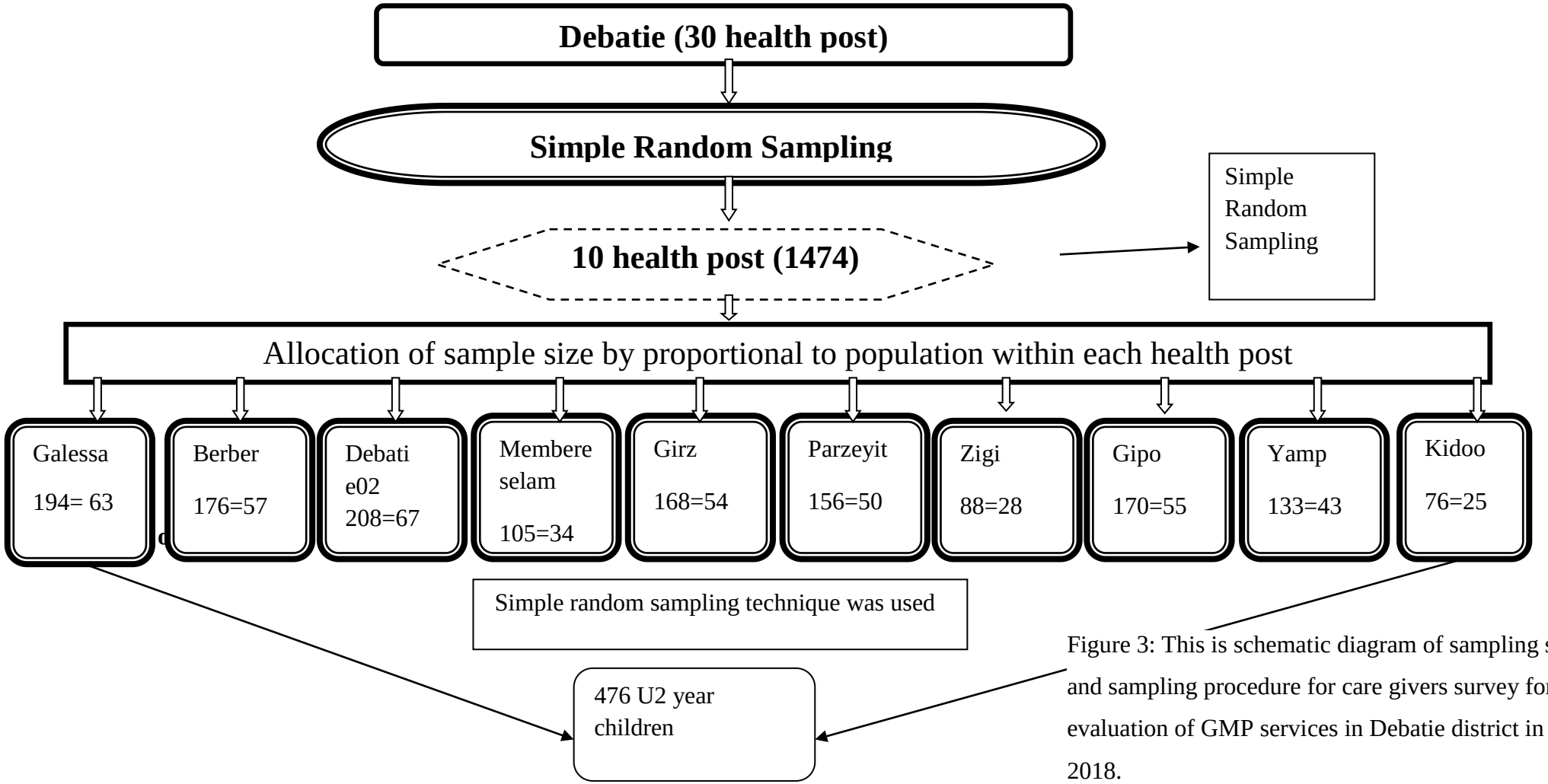

Figure 3: This is schematic diagram of sampling size and sampling procedure for care givers survey for evaluation of GMP services in Debatie district in 2018.

Direct observation: The first observation session was selected by using opportunity sampling at the time of arrival at HP that was conducted on the day of their GMP session. From 10 sampled HP in each one HEW observed **consecutively** for seven observation sessions on eligible children. Then after the first two observations was neglected to minimize the Hawthorne effect. Totally from ten sampled HP **50** observations were taken for analysis.

Key informants interview: The key informants were selected by purposive sampling technique the district supervisors and cluster coordinators of HEW were selected based on their specific role for the selected HPs. To select HEWs and HDAs leaders who had more experience with the practice of GMP and able to provide information about experiences of the GMP were used. The selection technique for interview were conducted through the (higher- lower) performing health posts based on their level of the availability, compliance and utilization dimensional indicators. Then We continued to conduct interviews until the point of data saturation (no new concepts emerged) which occurred after 12interviews in 6 HPs.

Resource inventory: Ten HPs were selected by simple random sampling which is provide equal opportunity to each health posts to include in the study. Assessment resource inventory were applied through directly observed by used resource inventory checklist.

Document review: Purposively from existing sources of information that are relevant for use in the evaluation were taken.

5.10: Inclusion and exclusion criteria

Inclusion criteria

All health posts in Debatie district in the study period

- Caregivers' with children 0- 23months who have registered and were attending GMP session in the selected HPs.
- Health extension workers assigned and working in the selected HPs at least for the last six month were included.

Exclusion Criteria: Those who have not been living in the selected HPs for the required period of months were excluded.

5.11. Data Collection

5.11.1 Development of data collection tools

A structured and semi-structured questionnaire are adapted from GMP implementation guidelines and referring different literatures (38).

GMP resource inventory tool: resource inventory check list was adopted from GMP guideline. The tool contains required number of human resources, GMP equipment and recording materials and regular supportive supervision in placed(5)

An observation checklist and Document review checklist.

The source adopted from GMP guideline thesis designed for the counseling session of GMP. The checklist covered sections on assessing recording data and growth promotion activities carried out by health extension workers for individual caregiver-child pairs(5,13)

Key informant in-depth interview guide: an interview guide was adapted from the previous qualitative study done on the same topic. Then on a field the questionnaires was modified in a way to gather important information on the following subject areas (33,39)

Care giver interview *questionnaire:* - structured questionnaire was adapted from previous study literature on the same topic, and referred Guideline of GMP that was designed for evaluation of GMP service. Care givers interview questionnaires were used to determine their child utilization on the weighing and to identify the possible determinant factors (5,31)

5.11.2. Data collectors

Observation, document review, in-depth interview and resource inventory were conducted by principal evaluator. For care giver survey ten data collectors were recruited. The data collectors were selected out of the evaluation area based on conversant with both English and the local language and having successfully completed a diploma in health Certificate. In addition, two BSC nurse were employed for overall field supervision.

5.11.3. Data collection field work.

Care giver survey: Then from each health post one health extension workers were assigned to linked data collectors with health development army leaders in each ketena. Then its head direction was taken. Caregivers included in the study were the main caregivers of the children

when the selected eligible respondent was absent during up to two consecutive home visits, from the closet HHs eligible respondent were replaced.

Resource inventory: Before undertaking any data collection, the first step made an inventory of available resources that are relevant for use in the evaluation. Then we directly observed the presence and their conditions by using checklist that developed for resource inventory.

Direct observation: The sampled HPs were visited on the day of their monthly GMP session. The first observation session was selected by using opportunity sampling at the time of arrival at HP. The justification of the study was illustrated to the participants.

For document review: Enough time was taken to extract the necessary information from the source.

In-depth interview: It was conducted with the local language they under stood easily. Both field not and audio record were done.

5.11.3. Data quality assurance

Prior to data collection pre-test was conducted (on 24 caregivers or (5%) of the sample size) in Bullen Woreda which is similar characteristics of the study area. The structured questionnaire was prepared in English, translated to Amharic language, and then back translated to English by two language experts to check the consistency. Both the data collectors and supervisors were trained for two days on the following topic which includes; the objectives of the study, the questions and how to administer them, the role and their responsibility in the study and research ethics. The supervisors and investigator checked each questionnaire on the same day for inconsistencies and in completeness of data. For qualitative data, the consistency between recorded audio and transcription was checked by M&E expert on the field area.

5.12. Data management and analysis

5.12.2. Data cleaning

At field level some unclear and incomplete questionnaires and errors which occurred during data collection was discussed among supervisors and data collectors to solve immediately on daily basis. After entry to check coding error and missing values, the data were cleaned by visualizing, calculating frequencies and during the time determine consistence and cleaned for data analysis. The completeness of data was checked and error was solved on the time.

5.12.1. Data entry

For quantitative data, after checking the data was coded and entered into Epidata version 3.1and exported to SSPSS for analysis. The recorded audio from interviewee was transcribed in full text in Amharic and was translated in to English. The qualitative data were coded and thematized by manually.

5.13. Data analysis

After data entry, data were exported to SPSS version 23 Software for the analysis. Primarily, Univar ate analysis was done to see the distribution of the study respondents then frequency, percent and mean of variables were used to see the overall distribution results. The outcome variable of utilization of GMP service was dichotomized if children who entered in the program attended 50% or more sessions of their years were categorized as adequate utilize of GMP service and didn't meet the least requirement were categorized as inadequate utilize of GMP service(30).

Binary logistic regression was used to identify candidate variables for multiple logistic regression models. Variables with P-value less than 0.25 during bi-variant analysis were identified as candidate. Multiple logistic regression analysis was conducted to see significant association between dependent and independent variables. P-value less than 0.05 and confidence interval of odds ratio was used to determine statistical association. The results were presented by using frequency tables, graphs and text narrate.

Secondly, for qualitative data the transcribed and translated data were analyzed manually under the thematic area of availability, compliance and utilization dimensions to explain quantitative finding.

Judgment matrix

The indicators under each dimension were judged based on the judgment matrix to determine whether the implementation of GMP service is being implemented as intended or not. To make evaluative judgment on the implementation of GMP service, the sum of the achieved value in each dimension were compared with overall judgmental criteria then evaluator together with key stake holders' decided on overall implementation status of GMP service. Judgment of the

implementation status of GMP service was made on each dimension. It was presented on the following table.

Table 2,Overall Judgment Matrixes and Analysis of Dimensions for evaluation of GMP services in Debatie district.

Dimension	**Value given**	**Judgment criteria**
Availability	30 %	[80–100]- Success fully implemented [70– 79] – partially implemented [< 70]-poorly implemented
Compliance	40 %	
Utilization	30 %	
Total	100%	

5.14.Ethical clearance Considerations

Ethical clearance and approval for the study was obtained from the Institutional Review Board of Jimma University. After that B/G/R/Health Bureau office known the study to be conducted in Debatie district. Then Letters of support was sent to the study district and selected health facilities. The study was carried out after permission obtained from the administrative offices of selected facilities. Adequate information about confidentiality and privacy was also conveyed. Oral informed consent was obtained from caregivers and health workers when they were fully aware about the interviews being voluntarily. The collected data was stored in a locked computer file and different codes were used for each interview in order to obtain confidentiality.

5.15 Evaluation dissemination plan

Primarily, the final evaluation report will be presented to Jimma University. To verify the validity of this message prior to broader dissemination, one day's workshop will be organized and key important stakeholders with service providers will be invited to participate for presentation of the evaluation findings. It will be effectively communicated to stakeholders through face to face interaction and supported by written documents. Also, efforts will be made to communicate the journal article for those wanting additional details. The results of the research will be disseminated to the most appropriate person of advisory group (Exactly they are including researchers, policy makers, implementers and individuals from the community) they were engaged from the beginning of the study, so the dissemination becomes easier.

Chapter Six: Result

Description of the study participants

Four hundred fifty eight (458) admitted patients were included in the study with response rate of 96.2%. Resource inventory was conducted in 10 health posts. GMP service related documents (Supportive supervision document, referral sheet) were reviewed. From a total of ten sampled HP 50 observations were taken for analysis; from each HP one HEWs were observed for five observation sessions.

Availability dimension

Human Resource

Among the total of ten HPs, seven (70%) of HPS were viewed have adequate number trained HEW per the standard (2HEW per HP). Regard to the HDAs leaders' structured in HPs, from all HPs, HDAs were recruited as per the national standard (1HDAs leader per 30 HH).

A 25 years' key informants said for inadequate number of trained HEWs, "…due to different reason like for education, high work load there were high turnover of HEWs"

As 27 years female HEWs about HDAs that, "due to presence of NGO (UNICEF) support HDAs leader were newly recruited in the recent time and organized as the standard"

Availability of GMP equipment and recording materials.

The result showed that all(100%) of observed HPs have weighing scale for measuring children's weight. Regarding to recording and reporting materials, all HPs had monthly GMP registration books and reporting formats. However, none of the HPs had GMP guideline, thirty percent (30%) of HPs had no weighing bags and 40% of HPs did not have a child growth charts.

As one 23 years HEW agree on the result and responded, *"…the district didn't supply the national GMP guideline and child health card frequently absent in our HP. then, we using family health card folder which contain section of GMP as apart, off curse we haven't reported about the absence of weighing bags to district office"*

The result showed that all HPs have national GMP recording books. KIIs agree on the result and one of them responded, *"…we have recording book but it is unnecessarily overcrowded and it makes too challenged to take the necessary information from the source."*

Frequency of supportive supervision

From a total of 10 health posts, 4(40%) health posts had visited their monthly growth promotion session from the (HC). However, the rest three HPs had not been visited how they carry out GMP in the prior 3 months of the evaluation.

A 28 years one immediate supervisor said, "…*transport issue, lack of* nutrition coordinator *in the last two months, and was the major reason for not conducted routine supportive supervision"*

Another 24 years of one immediate supervisor said, *"Of course I am not trained on GMP service* to ensure whether they carry out accordingly. So supervisions were made when there were presence of a malnourished or nutritionally risky children's in the HPs"

Overall judgment Matrix

Based on the judgment parameter, the level of implementation status of GMP service with respect to program resource availability was 71.4%, which was judged as **partially implemented**

Table 3:Judgment Matrix for Availability dimension in evaluation of GMP services in Debatie district, B/G region, 2018

S.No.	Dimensions and indicators	Expected #	Observed value n (%)	Weight	Score	Judgment
1	Proportion of HPs with at least two trained HEW on GMP.	10	7 (70)	12	8.4	[80–100]-Success fully implemented [70– 79] – partially implemented [< 70]-poorly implemented
2	Proportion of HPs in which sufficient (1HDAper30HH) HAD leader's recruited.	10	10 (100)	11	11	
3	Proportion of HPs which received supervision from HC three times in the previous three months.	10	4 (40)	10	4	
4	Proportion of HPs with functional Weighing scale in the time of study period.	10	10 (100)	15	15	
5	Proportion of HPs with weighing bags in the time of study period.	10	7 (70)	10	7	
6	Proportion of HPs having GMP implementation guideline.	10	0 (0)	12	0	
7	Proportion of HPs no stock out of child health card in the last three months.	10	6 (60)	10	6	
8	Proportion of HPs having GMP registration book.	10	10 (100)	10	10	
9	Proportion of HPs having service reporting format in the last three months.	10	10(100)	10	10	
Over all Availability				100	71.4	

Compliance

Majority (80 percent) of the counseling sessions were not followed the recommended counseling procedures of (Triple-A) approach. HEW were conduct Assessment, Analysis, and Action 25(50%, 13(26%), and 10(20%) observation sessions, respectively.

Table 4: compliance of HEWs with Triple-A approach in evaluation of GMP services in Debatie district, B/G region, 2018

Triple A approaches	Yes (%)	No (%)
step1.Assessed: **Does** HEW measured weight of a child to determine how well the child is growing or not?	25(50)	25 (50)
step2. **Analysis:** Does HEW ask the possible reason for adequate or inadequate growing of that child?	13(26)	37(74)
step3. **Action:** dose the HEWs provide counseling based on individual child growth monitoring data?	10(20)	40(80)
All components of Triple A approach were done	10(20)	40(80)

The quantitative finding is supported by the in-depth interview result in which 27 years HEWs said,"…*it is boring to do weighing for each individual on a regular basis with absence of additional HEWs because it makes work load and long waiting time, .as a result, we conduct weight measurement only for malnourished children to followed their weight gain"*

A 25 years health extension worker explained that, "…*for me, the graphical interpretation of the child growth status was not easily understandable we preferred MUAC measure it is easily possible to determine whether the child is malnourished"*

A 23 years' health extension worker explained that *"...we do not have child growth charts in our HPs to track the growth of the child at monthly for to communicate about child growth trends with caregivers"*

A 32 years' supervisor said, "…*the HEWs there are new HEWS in our staff who did not receive adequate trains for the growth curve interpretation skill, also from senior HEWs had lack commitments to applied growth monitoring for each individually child until now"*

From the total observation sessions, vitamin- A supplementation status was cheeked in 46(92%) sessions. Similarly, children immunization status was checked in 47(94%) of sessions. Child's growth chart was utilized for10 (20%) of sessions to record children's weight. Regarding to referral service, from identified 33 under 2 year children with SAM, 20 (60.6%) were linked to medical or nutrition center in the previous three months.

A 23 years' health extension worker explained that, "*…recording of one-time weigh measurement is meaningless because mothers not come in regular basis for weighing her child"*.

Another A 27 years health extension worker explained that*, "I don't think the growth chart necessarily to fill in and in every session return to mother expected from us, I was used this card to record immunizations to trace the defaulter. Also it was often not available in our HP"*

Four (60%) HPs did not conducted GMP session through regular fixed schedule that set by mutual agreement of the community members within the previous three months. Seven (70%) of HPs conduct regular community conversation conducted on the nutritional status of Children in the previous three months. Concerning to reporting, all (100%) HPs monthly report was sent within required reporting periods in the previous three months. However,

A 23 years' health extension worker explained that*, "Thus, we had not affixed scheduled for GMP session because it is clear that mothers mainly come for vaccinations. But, we do GMP as a part of integrated this or when a child come to HP with sick or malnourished. For wellbeing child, we had every three months a nutrition assessment program to select malnutrition children for food supplementation, therapeutic feeding center"*

Regarding to monthly GMP service recording and reporting data, all HPs had sent monthly reports to the HCs within the required reporting period.

Despite all HPs had sent their monthly data within the reporting period there was zero reporting found from the district, as the KII supervisor mentioned that, *"….the reason for zero reporting were due to nutrition officers absent during the reporting period and lack of other trained staff to compile report data to the next reporting system"*

Among 33under 2 children's that were identified child with SAM 20(60%) were referred to medical/nutrition center.

The quantitative finding is supported by the in-depth interview result in which 27 years *HEWs said, "…In our site area absence of NGO supporter for complementary food like other HPs that helped by (CPAR, WASH), poor their family health seeking behavior* makes *hinder to* make linkage with *medical/nutrition center"*

Among All HPs, three (30%) were not conduct regular community conversation since the last three months (monthly). Among All HPs, six (60%) were not conduct regular GMP session in affixed schedule since the last three months (monthly)

Majority of HAD leaders support the finding. Among these, 35 years from HDAs leader say that: *"…the HEWs didn't told us for community meetings dialogue throughout monthly but we conducted meeting only once a year for planning and then when issue of outbreak rising"*

A 31 years HEW also responded, *"…I feel shameful to call HAD leaders for routine meeting with the absence of any incentives that given, in some situations they come in distance and cooperate me too more, but not get any means of motivational but for the way to improve the program incentives for HDAs leaders need to be provided to work together with the same goal"*

Overall Judgment Matrix

Based on the judgment parameter, the level of implementation status of GMP service with respect to compliance of HEW s with the guidelines was 56.26%, which was judged as **poorly implemented.**

Table 5: Judgment Matrix for compliance dimension on evaluation of GMP services in Debatie district, B/G region, 2018

S. No	Indicator	Expected #	Observed value n (%)	Weight	Score	Judgment
1	Proportion of counseling sessions which offered in line with the triple-A approach.	50	10(20)	20	4	[80–100]-Successfully implemented [70–79]–partially implemented [< 70]-poorly implemented
2	Proportion of care givers who informed for next return visit	50	20 (40)	8	3.2	
3	Proportion of children checked vitamin- A supplementation status.	50	46 (92)	10	9.2	
4	Proportion of children checked immunization status.	50	47 (94)	10	9.4	
5	Proportion of observed sessions from which utilized child's growth chart to record weight.	50	10 (20)	10	2	
6	Proportion of children identified with SAM/who has lost weight for 3 consecutive visits referred to medical/nutrition center in the previous three months (n=33).	33	20 (60.6)	10	6.06	
7	Proportion of HPs in which GMP session conducted through regular fixed schedule that set by mutual agreement in the previous three months.	10	4 (40)	10	4	
8	Proportion of HPs in which monthly report sent within required reporting periods in the previous three months.	10	10 (100)	10	10	
9	Proportion of HPs in which at least three community conversation conducted on the nutritional status of children in the previous three months	10	7(70)	12	8.4	
	Overall			100	56.26	

Utilizations Dimension

Socio demographic characteristic

A total of 458 mother-child pairs were included in this study with the response rate of 96.2%. About 65.7% of mothers were age less than 30 years. About 123(26.8%) children were found within age category of 12-23 months and the rest 335 (73.1%) were infants. Majority (90%) of mothers were house wife in occupational status. Regarding to family size, 312(68.1) of them had less than five family members (Table 6).

Table 6: Socio demographic characteristics of care givers service coverage by HPs on evaluation of GMP services in Debatie district, B/G region, 2018

S.No	Category	Characteristics	Frequency	Percentage
1	Age of the mother	<30 years	301	65.7
		>=30 years	157	34.3)
2	Age of Children	0-11 months	335	73.1
		12-23month	123	26.9
3	Educational Status	no formal education	332	72.5
		primary level	72	15.7
		secondary and above	54	11.8
4	Family Size	<=5	312	(68.1)
		>5	146	(31.9)
5	Occupational status	house wife	408	(89.1)
		Others	50	(10.9)
6	Marital Status	currently married	426	(90)
		not currently married	32(7)	32(7)

GMP service coverage

Among health posts (10), three health posts (Galessa, Berber, Debatie 02) were reached GMP service coverage of greater than 80% while two of health posts (Yamp and Kidoo) were below 60%. The overall GMP service coverage among the sampled health post were 73.95%.

The qualitative finding of the reason for a child not enrolled in GMP given by 27 years old HEWs as, "*HDAs members were not inform us newborn children mothers early after birth, being not delivery at health facility, lack follow up of ANC, mothers were not planning to join in the GMP because perceive that child ages are not reached to be weighed 'unless their child becomes sick or due for immunization"*

Table 7: GMP service coverage by HPs on evaluation of GMP services on evaluation of GMP services in Debatie district, B/G region, 2018

S.No.	Health posts	Number of children's recorded(R)	Total number of children's estimated (E)	GMP service coverage
1	Galessa	194	230	84.34
2	Berber	176	218	80.73
3	Debatie	208	240	86.66
4	MembereSelam	105	175	60
5	Girz	168	230	73.04
6	Parzeyit	156	200	78
7	Zigi	88	120	73.33
8	Gipo	170	225	75.55
9	Yamp	133	225	59.11
10	Kidoo	76	130	58.46
Overall(10HPs)		1474	1993	73.95

Full Immunization

From the total 815 children's 12-23month, only 532 (65.27%) were fully immunized across the sampled HPs. with the highest coverage in Debatie HP(82.5%) and the lowest in Zig HP(41.7%). only one health post (Debatie) was reached full immunization coverage of greater than 80%.

The quantitative finding is supported by the in-depth interview result in which 23 years HEWs *"…lack of mother's eagerness to have full vaccinated their child, lack of awareness about the importance of immunization"*

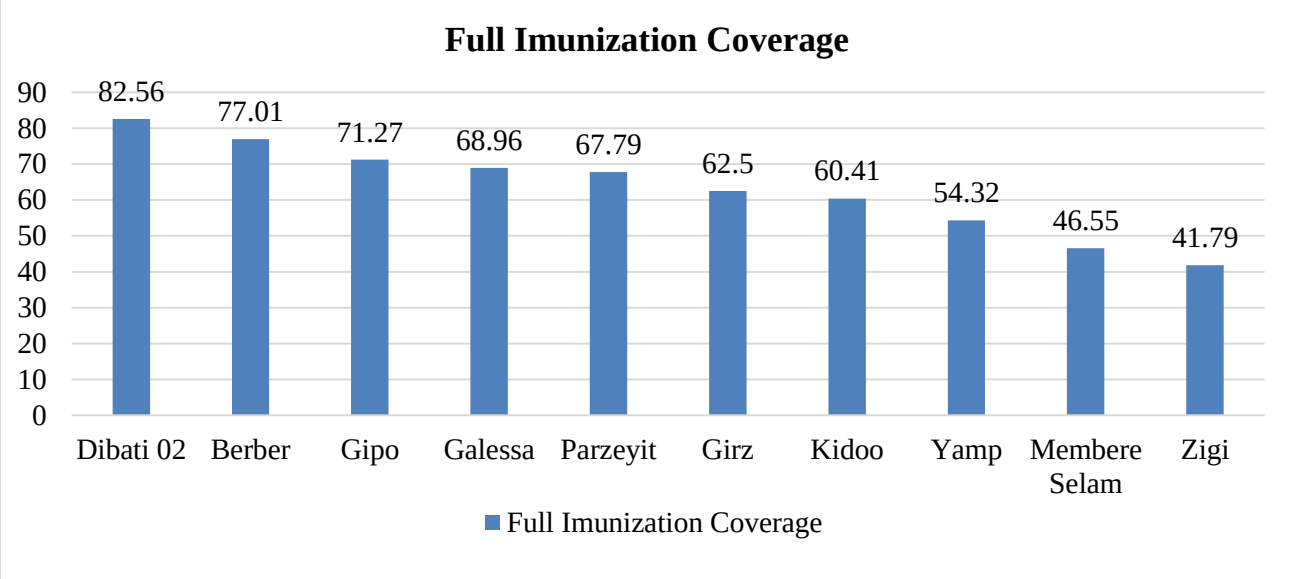

Figure 4: Full immunization service coverage by HPs on evaluation of GMP services.

Vitamin A Supplementation

From the total 1,123 children's 6-23monthwho were participated in GMP, only 604 (53.78%) had not missed the last vitamin-A supplement prior to six month of data collection. The proportion of children's age 6-23 month who were received Vitamin A ranged with the highest in Bereber (68.18%) and the lowest in MembereSelam (36.7%).

The quantitative finding is supported by the in-depth interview result in which 27 years HEWs "*….Lack of information about the campaign date and being out of residence when it was given*

and lack of home revisit done to trace missed supplementation when long walking time distance and the security issue were the mentioned reason".

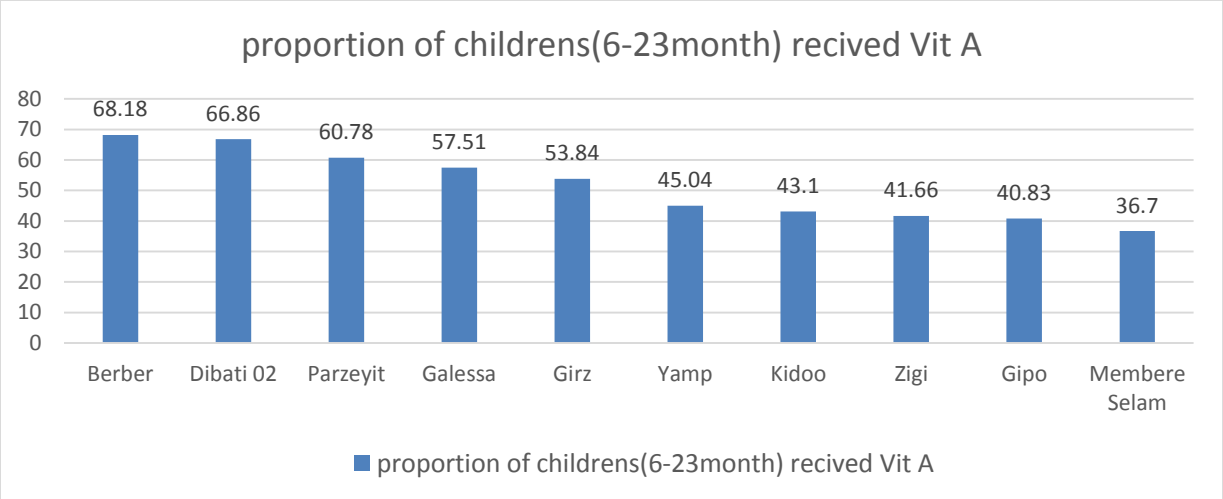

Figure 5: Vitamin A supplementation service coverage by HPs on evaluation of GMP services in Debatie district, 2018.

Adequacy of Growth monitoring

Care giver interviewee result showed that the proportion of children who utilized adequately GMP session in the study area found to be 21.6%. About (52.4%) of mothers had Unfavorable Attitude for attending GMP service. Three hundred twenty four (70.7%) of mothers had poor Knowledge on GMP service. two hundred fifty three (55.2%) of mothers were satisfied with GMP service.

Table 8: Mothers Knowledge, attitude, satisfaction on GMP service in Debatie district

SNo.	Variable	Category	Frequency	Percentage
1	Knowledge	Poor	324	70.3
		Good	134	29.7
2	Satisfaction	Dissatisfied	205	44.8
		Satisfied	253	55.2
3	Attitude	unfavorable attitude	240	52.4
		Unfavorable attitude	218	47.6
4	Distance	<30 minutes	264	57.6
		>=30 minutes	194	42.6

28 years old Key informant of HDAs commonly mentioned that, *"lack of awareness about the existence of weighing service, weighing service has been served only fixed by(HP) area, lack of community mobilization for weighing, HEWs did not inform us about GMP session, weighing was not operated in affixed schedule, then people preserves weighing needed only for child become sick and malnourished, mothers often dropped weighing when child complete immunization".*

Overall Judgment Matrix

Based on the judgment parameter the level of implementation status of GMP service with respect to utilization of GMP session was49.26 %, which was judged as poorly implemented.

*Table 9:*Judgment Matrix for Utilization dimension on evaluation of GMP services in Debatie district 2018

S.No.	Indicator	Expected #	Observed value n(%)	Weighted	Observed	Judgment parameter
1	Proportion of children(0-23month),who registered in GMP service from HPs catchment area	1,993	1,474(73.96)	20	14.79	[≥80] Successfully implemented [70– 79] – partially implemented [< 70]-poorly implemented
2	Proportion of(0-23) months children who adequate growth-monitored/attended GMP at least 50%or more number of visits from birth of a child months(n=458)	458	97 (21.18)	35	7.41	
3	Proportion children age of (6-23) months who participate in GMP who had not missed the last vitamin-A supplement.	1,123	604(53.78)	20	10.75	
4	Proportion (12-23) month children who participate in GMP who were fully immunized.	815	532 (65.28)	25	16.31	
	Overall Implementation with respect to Utilization Dimension.			100	49.28	

In summary based on the weight given for each dimension of process; the overall implementation status of GMP services was 58.7 percent. Which requiring improvement

Table 10: Summary of overall performance indicators of implementation status of GMP services in HPs of Debatie district, 2018

S.No.	Dimensions	Relative weight(W)	Score	Achievement in %(S/W*100)	Judgment parameter
1	Availability	30	21.42	71.4	Partially implemented
2	Compliance	40	22.50	56.26	Poorly implemented
3	Utilization	30	14.78	49.28	Poorly implemented
Overall Implementation of GMP services		**100**	**58.70**		**Poorly implemented**

Factors affecting Adequacy of GMP service Utilization

Variables such as family size, Attitude, knowledge, satisfaction, distance from GMP session area, receiving home visited from HDA within one month, and mothers have growth chart were associated with the dependent variable in the bivariate regression analysis and identified as candidate variable at p-value<=0.25 for multivariate logistic regression.

Table 11: Bi-variable logistic regression on factors associated with GMP service utilization in on evaluation of GMP services in Debatie district, B/G region, 2018

Sno	Category	Characteristics	Utilization		COR 95%CI	P-value
			adequately Utilized	Adequately not Utilized		
1	Age of the mother	<30 years	69	232	1.2(0.779,2.03)	0.347
		>=30 years	30	127	1	
2	Educational Status	no formal education	76	256	0.848(0.43,1.6)	0.625
		primary level	9	63	0.4(0.16, 1.03)	0.058
		Secondary	14	40	1	

3	Occupational status	house wife	324	84	0.6(0.3.1.1)	0.13
		Others	35	15	1	
4	Marital Status	currently married	333	93	1.2(0.48,3.02)	0.683
		not currently married	26	6	1	
5	Family Size	<=5	78	234	1.98(1.17,3.36)	0.011
		>5	21	125	1	
6	Attitude	Unfavorable Attitude	23	217	1	
		Favorable Attitude	76	142	5(3.02,8.42)	<0.0001
7	Knowledge	Poor	25	299	1	
		Good	74	60	14.7(8.67,25)	<0.0001
8	Satisfaction	Dissatisfied	30	175	1	
		Satisfied	69	184	2.18(1.35,3.52)	0.001
9	Home visit	Yes	36	63	2.68(1.64,4.38)	<0.0001
		No	63	296	1	
10	mothers have growth chart	Yes	51	82	3.58(2.25,5.71)	<0.0001
		No	48	277	1	
11	distance (self-report)	<30 minute	181	83	5.1(2.87,9.05)	<0.0001
		>=30 minute	178	16	1	

The multivariate logistic regression analysis, family size, Attitude, knowledge, distance from GMP session area, and mothers have growth chart were statistical significant association at p-value 0.05 with adequate utilization of GMP service.

Care givers who had family size <=5 children's 1.93 times more likely for adequately Utilized GMP service as compare to mothers who had children's >5 (AOR=1.93; 95%CI:(1.02,3.67), p-value 0.043.

Caregiver's knowledge and attitude were independent predictors of adequate utilization of GMP service. Care givers who had favorable attitude towards GMP service had 3.25 times more likely for adequately Utilized GMP service as compare to care givers who had unfavorable attitude

(AOR=3.25; 95%CI: (1.78, 5.92), p-value <0.0001).Care givers who had good knowledge on GMP service had 9.52 times more likely for adequately Utilized GMP service as compare to care givers who had poor knowledge. (AOR=9.52; 95%CI: (5.38, 16.85)p-value <0.0001).

Care givers who have growth chart for GMP service had 2.62 times more likely for adequately Utilized GMP service as compare to their counterparts. (AOR=2.62; 95%CI: (1.468, 4.69), p-value =0.001).Care givers whose distance from the facility talks less than 30minute were 2.41 times more likely for adequately Utilized GMP service as compare distance talks greater than 30 minute (AOR=2.41; 95%CI: (1.25, 4.66), p-value =0.008.

Table 12: Multi-variable logistic regression on factors associated with GMP service utilization in on evaluation of GMP services in Debatie district, B/G region, 2018

S. No	Category	Characteristics	Frequency	Utilization		COR 95%CI	P-value	AOR 95%CI	P-value
				adequately Utilized	Adequately not Utilized				
1	Family Size	<=5	312(68.1)	78	234	1.98(1.17,3.36)	0.011	1.93(1.02,3.67)*	0.043
		>5	146(31.9)	21	125	1		1	
2	Attitude	Unfavorable Attitude	240(52.4)	23	217	1		1	
		Favorable Attitude	218(47.6)	76	142	5(3.02,8.42)	<0.0001	3.25(1.78,5.92)*	<0.001
3	Knowledge	Poor	324(70.7)	25	299	1		1	
		Good	134(29.3)	74	60	14.7(8.67,25)	<0.0001	9.52(5.38,16.85)*	<0.001
4	Satisfaction	Dissatisfied	205(44.8)	30	175	1		1	
		Satisfied	253(55.2)	69	184	2.18(1.35,3.52)	0.001	1.37(0.75,2.49)	0.305
5	did HDA visit you with in one month	yes	99(21.6)	36	63	2.68(1.64,4.38)	<0.0001	1.58(0.82,3.04)	0.168
		no	359(78.4)	63	296	1		1	
6	mothers have growth chart	yes	133(29.0)	51	82	3.58(2.25,5.71)	<0.0001	2.62(1.468,4.69)*	0.001
		no	325(71)	48	277	1		1	
7	distance (self-report)	<30 minute	264(57.6)	181	83	5.1(2.87,9.05)	<0.0001	2.41(1.25,4.66)*	0.008
		>=30 minute	194(42.4)	178	16	1		1	

Chapter Six: Discussion

Availability Dimension

As the Ethiopia health sector development program(HSDP-III) stated that in order to address the maternal and child mortality improve the implementation of health extension program on community based intervention was planned as such each health post should be deployed with two HEWs. However, in this study about three of out of ten HPs (30%) were observed inadequate number of HEWs per the standard. As the qualitative result support that the reason for this deference was problem of "staff turnover, delay on deploying new HEWs "This would influence work load on HEWs and long waiting time to dialogue GM result on individual basis, and would make inconsistent contact with community member(16).

On this evaluation finding showed six out of ten HPs were not visited regularly by their immediate supervisors. This finding is not in line with the technical experts recommend about the regularity of supportive supervision of GMP. which was stated the practicality of GMP session need to be supervised in monthly to coaching good counseling skills, to correct mistakes that they made in their registers and to motivate the growth promoters to do their work well(13). This finding also lowered when compare with study finding of successful growth monitoring in South Indian Villages from which the supervisor visited each village and independently checked about 20% of the child weights every month (22).The observed gap might be due to transport issues, an absence of given priorities to GMP service rather (acute malnutrition,)supervisors itself not trained in GMP. This might be reflecting the low achievement of GMP implementation achievement in the area, finally in this circumstance the GMP would be unsuccessful.

As the GMP guideline suggested that for the successes full of a GMP implementation, the following resources need to be present for GMP session, which includes weighing scales, weighing bags, growth charts, registers and monthly report forms(5). Also, according to in 2012 UNICEF had promises to increase resource allocations for a prioritized affecting region of Ethiopia includes Benishangul Gumuz region, in the study area hypothetically all health posts were expected equipped with full set of resources that needed for GMP session(40).

However, these evaluation findings showed, in Debatie district GMP services have been run on with lacking of GMP implementation guideline in all sampled HPs, about three HPs and four HPs had not weighing bags and growth chart respectively. Through this the intervention of GMP would not appear to meet the intended objectives. This finding is comparable with the USAID'S study finding on review of existing nutrition related materials observed gap in Ethiopia which Shown Protocols /guidelines are not available in health facilities, counseling card supplies are not being restock(19).

But, on this study all sampled HPs (100%) available with weighing scale and this finding is better when it was compared with 55% finding of weighing scale availability during previous study conducted on ICCM in Benishangul(18).This better result change might be due to evaluation assessment activities had some influence on stake holders to carrying out GMP activities or the involvement of partner working on, the qualitative findings support this fact it was not there in the previous but now a day we have not deficient in a weighing scale.

Compliance Dimension

In this study the evaluation finding showed GMP did not operated the way it ought to be because (80 percent) of the counseling sessions were not followed the recommended counseling procedures of (Triple-A) approach. That means, it was not in line with the technical experts' recommendation on the way forward GMP implementation Such as, GMP without proper tailored with triple -A counseling it is not recommended, Weight of a child need to be recorded and linked with individual counseling, when GM information is not used to inform the counseling that is not GMP intervention, weight measurement should be maintained. Measurement of MUAC should not be to replace growth monitoring. GMP requires the regular contact or monthly measurements should be done for the first 24 months since focus of GMP is on children under 2(13).

This result rate also can be interpreted the Ethiopia task force on future outcome of GMP intervention would lead to unsuccessful, this is supported ,As UNICEF conducted review ***of*** GMP implementation evaluation on deferent country, the primary reasons for unsuccessful GMP of the most country programs were identified as due to lack of deal with GM information to analyze and to take actions on the GMP session .Also the review finding suggested it is likely

that demand for the regular monitoring of growth cannot be created unless communicated with the process of Triple-A dialogue(22).This findings have extensively low ranging when we compared with the evaluation study finding of Uganda and Ghana from which in both study all (100%) observed counseling sessions followed by recommended counseling procedures of (Triple-A) approach(23). The reasons of they did not followed the expected counseling procedures might be due to lack of regular support supervision in placed, in adequate growth chart availability, inadequate skill, lack of commitment and work load of HEWs. Also this gap was reflected by the qualitative result finding.

Also, the GMP guideline suggested in every growth monitoring session it is recommended deciding about the next return visit day, and always recording of the Child's weight on the growth chart. Because, the success or failure of GMP depends on how the information and the chart are used. This makes care givers would be an active participant on the activity. But, on this evaluation finding about 40% of observation session were not informed about the next return visit day, and for 80% of observation session was not done the recording of the Child's weight on growth chart. This is in consistent with the finding of study done on Kenya in which the date of next visit was clearly indicated for all mothers. And also on the study finding of Gahanna for 97% of observation sessions the child weight recording on the growth chart were carried out appropriately(41). The observed difference might be due to in the present study some HPs were not operated GMP session on a regular basis of fixed schedule, shortage of growth chart to use in weighing session. The qualitative finding of *one KII said* "*most of time HEWs would not believe on the expectation to fill in and deciding the next return visits as essential component of the service".*

Also, GMP guideline recommended in order to effectively achieving healthy growth of children; in every GMP session care givers must be promoted to have the full immunizations and vitamin-A supplementation of their children. Then in this study about 83% observed session for each checking the immunization status child was done. This is better when we compare with the evaluation study finding of Uganda from which checking the children immunization status had been done for (70 percent) of the session(24). The observed superior result may be due to in this study health extension workers were more concerned for immunization program than GMP, this supported by the qualitative finding of one KII of HEWs as described *"we gave primary*

responsible for immunization because latter the office will ask us for defaulter terracing in immunization program, but no one accounted us for who missed GMP"

Also, in order to achieve the aim of GMP, effective links between the front lines providers and the community were expected to identify refer and follow up children accordingly. As the GMP guideline suggested when a child with severely malnutrition with lost weight for 3 consecutive visits it should be referred to medical care or nutrition center. However, in this study found for 40% of identified children with SAM who did not gain weight for 3 consecutive months were not referred /linked to nutrition center. Also this finding is lower than the planned program target objectives which was to achive100%(42).And very lowered when we compared with study finding of successful growth monitoring in South Indian villages and study done in Uganda from which all children who did not gain weight for 3 consecutive months were referred accordingly(22). The observed gap might be due to inconsistent participation, lack of existing nutrition food center in the area. But, as the GMP guideline suggests if the child has not gained adequate weight for three consecutive months with Weight below -3Z scores, that indicates those child were being (very dangerous) at risk of becoming death.

Also, in order to influence family level decisions regarding the child's care at home or the need for health seeking behaviors, On the GMP operational principle suggested from each HP catchments must be held regular community dialogue with HDAs leaders (at least one in month) on nutrition based agenda. Also for encourage family's participation the monthly weighing sessions should held on a fixed schedule that set by mutual agreement(9). However, in this study found of three out of ten(30%) HPs were not done regular community dialogue, six out of ten (60% of) HPs haven't a fixed schedule for monthly weighing sessions, the deference might be due to HEWS not be committed to promote the interventions, lack of regularity of supervision visits to oversee the functionality of HEWs GMP session and the reluctant of HDAs leaders to come up on regular basis because on the qualitative finding reflected lack motivational factors were commonly clammed as a gap to do together in the same goal of health system.

Utilization Dimension

As the program expert's recommended in order to effectively achieve healthy growth of children, increased coverage of full immunizations and vitamin A supplementation are expected in the GMP intervention(13). However, in this study from children who participate in GMP the average full immunization coverage across the sampled HPs was (65.27%), this is lower than the minimum national HSTP target plan of 91% to be reached with full immunization coverage. this gap may be due to Poor commitment of HEWs on integration and irregularity of GMP service. This result could potentially be hindering the growth failure prevention efforts of GMP because its success largely depends on linkages with immunization services.

But, this result is better than the Benishangul Gumuz region status of full immunization coverage that reported on EDHS 2016 which was 57%(28,29).This superior result might be due contact of GMP may had influences demand on care givers to convey the child into the health services timely.

Also, in the present study the overall proportion of children age of 6-23 months who participate in GMP those who had not missed the last six month vitamin-A supplement was 55.6%.This is very lower when compared with the national HSTP1 target plan of 95% to reach by vitamin A supplementation coverage that assumed to be reduced child mortality by 23%.This lower result might be due to lack of commitment of HEWs in promotion of the intervention through regular GMP session and limitation of Partner NGO who working in this distinct intervention, but the finding is better than the finding of EDHS 2016 which was supplementedvitamin-Aonlyfor38% of children age 6-23 months. The current observed difference might be due to intervention of GMP had influence a change.

As UNICEF evaluation finding of GMP review programs suggested the high program service coverage and the high frequency of participation are necessary for the better public health impact and lowered rates of malnutrition. As such, the benchmark of GMP implementation assumed to

be effective when the service coverage achieved at least 80% of children in the catchment area. And also, any individual child should participate at least 50% of the visit time per their age of months or (each child should have growth assessed at least half of visit time per their months)(2,27).

However, from this study the average GMP service coverage across the sampled health post was 73.95%, with range of the highest coverage in Galessa HP(84%) and the lowest in Kidoo HP (58%),which is not reached the minimum bench mark of planned target coverage which was to reach at least 80% of children in catchment area, and lower when compare with 95% coverage of the study Uganda, in which only four villages had less than 90% coverage, and lowered from coverage of 90% in South Africa .the observed deference might be due to in those study utilize home visits to put the children into the program intensively conducted and awareness creation activities for regular growth monitoring were highly facilitated in every means of contact since they were project based prospective study.

Also, on the current study the proportion of (0-23month) children who adequate utilized the GMP service in the study area was 21.6%. The current result of adequate utilization rate was very low from the minimum bench mark point that defined on the GMP guideline and the national HSTP target which was at least 80% of children to be attend half of the visit time per their age (in months). this is the minimum level of point to for reaching the SDGs targets(13,28). Also, this result rate can be interference from achieving the country goal of goal of the 'Seqota' Declaration implementation plan that stated zero stunting and end child under nutrition by 2030(8).And as contradict the convention of FDRE that signed on the international children rights (UN, World Summit).which stated that each country had responsible to institutionalize GMP programs as one of the actions to prevent malnutrition then every child has a right to growth monitored adequately for not to become malnourished(43).

Also, the current finding is very low when compared with the study finding of Afghanistan where attended (87%), Uganda (72%), Rwanda(79.7%), South Africa(*60%)*of planned GMP sessions the difference might be due to in those study from all of them mentioned overall care takers were satisfied with the way in which the program was run, overall growth promoters were committed to do their role in the program, routine Support supervision visits make motivate

promoters to do their work well, home visits for monthly weighing sessions have been effectively done, adequate number of human resource and full set of GMP tools. Also, this difference are supported by a qualitative result finding of HEWs use inappropriate tools in GMP, irregularity of service, lack of promotion for regular weighing session to mothers were mentioned reason but this finding is relatively high from study finding of southern Ethiopia (16.9%)difference might be due to differences in operational definitions, time deference.

On this study Half (52.4%) of mothers had Unfavorable Attitude for attending GMP service, which is not similar with that of 42.6%from southern Ethiopia reported poor attitude, and98% of study Ghana with good attitudes towards GMP service. The observed difference might be due to on those study categorization of attitude by yes/no may lead to having good scores on their study. The current low attitude status may imply the result of lack exposed to tailored counseling. Which is supported by the study review finding of UNICEF that suggested, demand for the monitoring of growth cannot happen unless the Triple A process of dialogue and communicated on local existed information(22). The qualitative study of South Africa said resistance in local culture to weighing children due to fear of being seen “evil eye”.

Regarding on overall knowledge status in this study found (70%) of mother’s/care givers had poor Knowledge on GMP service. This finding is in consistent with similar study conducted in Ghana which is (47%) and the study conducted in southern Ethiopia which is (53.%)(31,44).The difference may come from deference in care givers educational level, occupational status, also lack of exposure to GMP information might be contribute to mother’s poor knowledge status. On those study finding reported mothers which have no education, no formal education and those who don't get adequate counseling were more likely to have poor knowledge.

Care giver satisfaction on regular GMP service was (45%);care givers were claimed to be dissatisfied with the way in which the program was run, this can be due to in most HPs were not taken mutual agreement decisions from the community about the way of program activity. yet, the operational rule of GMP session suggested the program be conducted in a way mainly to suit caregivers not health workers (5). The finding also comparable with the study finding of (61%) in which identified the main reasons for dissatisfaction on regular GMP service were poor

services, poor accessibility of facilities , bad behavior on the part of the service providers , long waiting times and lack of tailored advice (22).

Factors Affecting Adequate Utilization of GMP service

From multivariate analysis, family size, care giver knowledge, attitude on GMP service, distance from the service area, and having child growth chart were significantly associated with utilization of GMP services. This study found an inverse relationship between family sizes and utilization of GMP services. This finding is consistence with study done of southern Ethiopia in Dawro zone(14). This might be due to in a way of GMP program runs it may had interfered with the mothers 'of other duties or not at a time convenient to parents.

Caregiver's knowledge and attitude were independent predictors of adequate utilization of GMP service. Care givers who had favorable attitude towards GMP service had 3.25 times more likely for adequately Utilized GMP service as compare to care givers who had unfavorable attitude. this is might be due to the given messages may not be relevant, practical, or feasible for mothers to implement and may not even be credible, not adequate time is devoted to dialogue /counseled them, or there may be societies with cultural against weighing of young children which may be a reason. Because, findings of Review in UNICEF suggested that demand for growth monitor can only be created by process of dialogue and communicated around locally relevant information.

Also, Care givers who had good knowledge on GMP service had 9.52 times more likely for adequately Utilized GMP service as compare to care givers who had poor knowledge. The finding is supported by the study conducted in Afghanistan (30).From which described because of knowledge on the GMP program eighty-five per cent of participants' caretakers bringing their child for the regular weighing session.

Care givers who have growth chart for GMP service had 2.62 times more likely for adequately Utilized GMP service as compare to their counterparts. These might be due to growth charts could aid visualize the child's growth pattern and, as a result, helps to appreciate the benefits of regular growth monitoring. This finding is supported by the study conducted in southern Ethiopia(31).Also, in finding of Honduras that showed when caregivers were given the weight of their child and a "goal weight" for the next month, they remembered the weight and brought their child for weighing with great curiosity to see if they made the goal weight.

Care givers whose distance from the facility talks less than 30 minute were 2.41 times more likely for adequately Utilized GMP service as compare distance talks greater than 30 minute. The finding is supported by Ethiopia ICCM national survey 2012 (18). This is indicates GMP was not conducted as near as possible to people's homes in the area; on the study ICCM survey finding of Ethiopia suggested being living closer to the service area are make possible care givers more likely to seek care for their child. This also supported by the study finding of Afghanistan in which identified the most common reason in the non-participant group for not attending a GMP program was the absence of nearby a program area(30).

Strengths and Limitations of this evaluation finding

In this study used simple and standard indicators that have been designed to use for GMP evaluation by UNICEF evaluation office. Also, the information has local relevance that is relevant to the problems experienced and comparable with other studies. There is participation from researchers, service providers and policy makers this would contribute the acceptability of likely changes to improve service and ultimately lead to better health outcomes for the population served.

However, also can be limitations When health extension workers are being observed Howe tern effect bias from service providers may encounter. Even though the presence of an observer may have influenced the counseling sessions, this was minimized by ignored the first two observations from the analysis. Also, from care givers interview recalling bias might be possible limitation so that this study was employed with large sample size.

Chapter 7: Conclusion and recommendation

7.1. Conclusion

From these results it can be concluded that GMP implementation activities were not well carried out which was judged poorly implemented. Based on judgment parameter the availability of resources for providing GMP service was judged as partially implemented. However, the GMP activities have been going on quite insufficient of needed resource for GMP service such as. Lack guideline, shortage of growth chart, weighing bags, in adequate human resource, lack of close supportive supervision in placed.

Based on judgment parameter the overall implementation status of GMP service with respect to compliance of HEWs was judged poo**r** especially, referrals, counseling with triple A Approach, deciding for the next visit session, using of growth chart and conducting regular GMP session fixed schedule.

Moreover, the overall utilization GMP service also was judged poor. GMP service coverage, adequacy of participation on the GMP session, and GMP intervention on full immunization and Vitamin A supplementation were implemented below the national target. Family size, care giver knowledge, attitude on GMP service, distance from the service area, and having child growth chart were significantly associated with utilization of GMP services.

7.2. Recommendations

It is clear that the current functioning of GMP implementation must be improved in the following dimensions to achieve the intended outcome of GMP.

Regional Health bureau

- ✧ Should adopt GMP implementation guideline from different countries where it was available and need to be disseminating to the operational unit of GMPservice**.**

Woreda Health office

- ✧ Woreda health office planning should take in to account to provide motivational inceptives for the team members of HDAs leaders that can be create sense of owner ship to work in the same goal.
- ✧ The numbers of HEWs be sufficiently staffed and better concentrated to needy health post this is will help to reduce work load of HEWS and caregiver waiting time also the contact with the families will be more frequent and consistent.
- ✧ Immediate HEWs supervisors from HC need to be trained in GMP and to be provided means of transport to the centers when some of the weighing sites are far.
- ✧ The office should ensure the adequate supply of growth chart, weighing bags timely before they become stock out over month.

Health posts

- ✧ During the GMP session HEWs should provide counseling through triple-A (assessment analysis, action) approach since it was designed to affect family-level decisions for the nutritional outcome of child. And, the growth status of child needs to be recorded on growth chart.
- ✧ In each HP HEWs should committed regularly to identify and refer when children have not gained adequate weight with -3Z scores, for three consecutive months because that child is particularly at risk of becoming death.
- ✧ Efforts are being made to access the monthly weighing session activities for who live in distance combination of the two rather than only fixed at HP level.

- ✧ The program should run in a way the time and day convenient for most members of the community.
- ✧ To increase GMP service coverage and regular GMP participation, a child who seen in every month of GMP should be given an appointment for next return visit, also, GMP sessions should be conducted on a fixed schedule, on days set by mutual agreement
- ✧ Awareness creation activities should be put in place through strengthens regular community dialogue discussion session with HDAs leaders.
- ✧ The children missed by vitamin A and immunization supplement are the ones for whom need attention most to prevent children underweight effectively therefore it must be noted to be use regular checking of child as part of growth promotion.

For future researcher

- ✧ There is need to conduct quality of GMP service study in other context to establish particular measurement error of GMP operational practices because effectiveness is also determined by quality of service. After 3-4 years out come evaluation need to be conducted on the same area to seen that this finding contributes on the sustainability of the program.

Chapter Eight: Meta Evaluation

Summative Meta-Evaluation was conducted. The evaluation was conducted by using four program evaluation standards. (Utility, feasibility, propriety and accuracy). The tool contains 25 checkpoints The Judgment parameter was decided overall Judgment parameter scores ≥ 75% of the check points satisfied, then the evaluation document/procedure was considered as satisfactory. The overall status of the evaluation was measured 88 percent which was Satisfactory according to the standards criteria (Table 13)

Table 13: Meta evaluation result for on evaluation of GMP services in Debatie district 2018

SNO	Standard	Total checkpoints	Total checkpoints met n (%)	Judgment
1	Utility	6	6(100)	Satisfactory
	Feasibility	6	5(83.3)	
	propriety	5	4(80)	
	Accuracy	8	7(88)	
Total		**25**	**22(88)**	

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Annexes

Indicator definition for Availability Dimension

S.No	Indicator	Nominator	Denominator	Data source	Data collection Method
1	Proportion of HPs with at least two trained HEW on GMP.	Number of HPs with at least two trained HEW	Total number of HPs	Facility human resource records	Human resource inventory
2	Proportion of HPs in which sufficient (1HDAper30HH) HAD leader's recruited.	Number of HPs in which sufficient HAD leader's recruited.	Total number of HPs	Facility human resource records	Human resource inventory
3	Proportion of HPs with functional Weighing scale in the time of study period.	Number of HPs with functional Weighing scale in the time of study period.	Total number of HPs	HPs	Resource inventory
4	Proportion of HPs with weighing bags in the time of study period.	Number of HPs with weighing bags in the time of study period.	Total number of HPs	HPs	Resource inventory
5	Proportion of HPs having GMP implementation guideline.	Number of HPs having GMP implementation guideline.	Total number of HPs	HPs	Resource inventory
6	Proportion of HPs no stock out of child health card in the last three months.	Number of HPs no stock out of child health card in the last three months.	Total number of HPs	HPs	Resource inventory
7	Proportion of HPs having GMP registration book.	Number of HPs having GMP registration book.	Total number of HPs	HPs	Resource inventory
8	Proportion of HPs having service reporting format in the last three months.	Proportion of HPs having service reporting format in the last three months.	Total number of HPs	HPs	Resource inventory
9	Proportion of HPs which received supervision from HC at least3 times in the last three months.	# Of HPs which received supervision visit from HC three times in the last three months.	Total number of HPs	monitoring system data recording book	Document review

Indicator definition for Compliance Dimension

S.No.	Indicator	Nominator	Denominator	Data source	Data collection Method
1	Proportion of counseling sessions which offered in line with the triple-A approach.	Number of counseling sessions which offered in line with the triple-A approach.	Total number of counseling sessions	Client-provider interaction	Direct Observation
2	Proportion of care givers who informed for follow-up or next return visit	Number of care givers who informed for next return visit	Total number of counseling sessions	Client-provider interaction	Direct Observation
3	Proportion of children checked vitamin- A supplementation status.	Number of children checked vitamin- A supplementation status.	Total number of counseling sessions	Client-provider interaction	Direct Observation
4	Proportion of children checked immunization status.	# of children checked immunization status.	Total number of counseling sessions	Client-provider interaction	Direct Observation
5	Proportion of observed sessions at which utilized growth chart to record weight of child.	# of observed sessions at which utilized growth chart to record weight of child	Total number of counseling sessions	Client-provider interaction	Direct Observation
6	Proportion of children identified with SAM/who has lost weight for 3 consecutive visits referred to medical/nutrition center in the previous three months	# of children identified with SAM/who has lost weight for 3 consecutive visits referred to medical/nutrition center in the previous three months	Total number of identified SAM cases in the last three months	GMP service records	Document Review
7	Proportion of HPs in which GMP session conducted through regular fixed schedule that	# of HPs in which GMP session conducted through regular	Total number of health posts	Monthly site reports	Document Review

	set by mutual agreement in the previous three months.	fixed schedule in the previous three months.			
8	Proportion of HPs in which monthly report sent within required reporting periods in the previous three months.	#of HPs in which monthly report sent within required reporting periods in the previous three months.	Total number of health posts	HMIS minute book	Document Review
9	Proportion of HPs in which at least three community conversation conducted on the nutritional status of Children in the previous three months	# of HPs in which at least three community conversation conducted on the nutritional status of Children in the previous three months	Total number of health posts	Community conversation Minute book	Document Review

Indicator definition for Utilization Dimension

SNo.	Indicator	Nominator	Denominator	Data source	Data collection Method
1	Proportion of children (0-23month),who registered in GMP service from HPs catchment area	Number of children (0-23month),who registered in GMP service from HPs catchment area	Number of estimated children (0-23month),who were present in HPs catchment area	GMP register existed data from HP(for estimates)	Document review
2	Proportion of(0-23) months children who adequate growth-monitored/attended GMP at least 50%or more number of visits from birth of a child months	Number of(0-23) months children who adequate growth-monitored/attended GMP at least 50%or more number of visits from birth of a child months	Total sampled (0-23) months children registered on GMP	Caregiver	Caregiver survey
3	Proportion children age of 6-23 months	Number children age of 6-	Total number of (6-23)	GMPregistersrecords.	Document

	who participate in GMP who had not missed the last vitamin-A supplement.	23 months who participate in GMP who had not missed the last vitamin-A supplement	months children registered on GMP		review
4	Proportion (12-23) month children who participate in GMP who were fully immunized.	Number of (12-23) month children who participate in GMP who were fully immunized.	Total number of (12-23) month's children registered on GMP.	GMP registers records.	Document review

English Version Questionnaire

Introduction remark

My name is_____ I came from Jimma University. I came here to conduct evaluation on growth monitoring and promotion service implementation. The purpose of this evaluation study is to find the ways of improving GMP service. I am interested to know your experiences. The questions will be answered by caregivers of under-two year children who live in study area.

Consent form to the mother/care givers

I want to thank you for taking the time to meet with me today My name is ……. working with ……. District health team. I am here on behalf of the GMP service to learn about growth monitoring in order to identify areas for program improvement. Then would like to talk to you about your experiences participating on regular GMP session. The interview questions should take less than 30 minutes. Please feel free and do not get worried since. All responses will be kept confidential. Are there any questions about what I have just explained? Are you willing to participate in this interview? If the mother agrees go ahead and interview.

SECTION 1: DEMOGRAPHIC CHARACTERISTICS

INSTRUCTIONS: Ask the respondents the question and draw a line across the box for the response in the appropriate box / space.

1.1. .Age of child in Months_____

1.2. What is the age of the mother/caregiver in year's _____

1.3. What is your marital status?

1. Never married□3. Separated/Divorced2Married& living together 4.Widowed

1.4. What is your educational level?

□1. Can't read and write□3 Primary level□2. Can read and write 4. Secondary and above

1.5.What is your occupation?

□1. Housewife □3.Daily worker2.Government/NGO employee□4. Merchant5. Others

1.6. Households family size_____

Section 2. Maternal Attitudes on GMP Service

S.No.	Variables	St disagree	Disagree	Neutral	Agree	St. agree
AT1	Monthly weighing of a child could bring change on the child growth.					
AT2	It has been good for you and your child to come to the monthly weighing sessions.					
AT3	Continue to attend weighing even the child is fully immunized its schedule.					
AT4	The HEWs teaching messages was valuable					
5AT	Enthusiastic to have children's weight checked regularly					

Section3. Maternal Knowledge about GMP service information

3.1. Understanding of GMP

1. Monthly weighing of a child
2. Immunization
3. Monitor a child who get food aid supplementation
4. Don't know

3.2. Criticaleligible age groups for GMP.

1, Children <2 years of age 2, Children 0 years to 5 years of age

3, Greater than six month of age, 4, don't know

3.3. At what age should a mother start weaning her child?

□1.At birth □3.After age of 1 year

□2. After six months of age .□4.Don't know.

3.4.The interval between GMP visits.

□1every month □2every three month

□3.Every 6 months □4 don't know

3.5. WhoisformallytheGMP service provider?

□1.HEWs □3.Doctors

□2.Nurses /Midwives □4.Don't know'

3.6. Do you know the Place where you have to take your child for GMPservice?

□1Yes□2 No

3.7. Haveyouunderstandforwhat purpose the growth chart needed?

□1. Yes□2. No

3.8. For whom the GMP service to be required?

□1.Fora child who is growing well.

□2.Forchildren who are under-weight

□3. For both who growing well and undernourished children.

□4. Don't know

Section 4. Maternal/ Care giver Satisfaction on GMP Service

Rate your level of satisfaction according to the given below score.

1/=Very dissatisfied 2/=Dissatisfied 3/=Neutral 4/=Satisfied 5/=Very satisfied

s/n	Satisfaction item	V. Dissatisfied	Dissatisfied	Neutral	Satisfied	V.Satisfied
1.	How do you satisfy with HEWs show respect to family or care not to offend.					
2.	How do you satisfy with the waiting time you spend at center					
3.	How do you satisfied with the HEWs teaching messages					
4.	How do you satisfy with the convenient of service time /day with your other essential duties?					
5.	How do you satisfy with commitments of HEWs to create demand for GMP service					
6.	How do you satisfy with the distance possible to go the service area					
7.	How do you satisfy with the convenient of room to be weighed your child					

SECTION 5: Availability or care giver possession of growth chart, commitment of growth promoter and the service area related variables.

5. Does the child have his or her Child Health Card/growth monitoring chart?

□1Yes□2.No

5.2. Can you say HDAs leaders (1-5 networks) being active in community mobilization for the weighing session inevery month?

□1. Yes□2. No □3, Not sure

5.3. How long times have you taken to go through the whole process of GMP _____minutes?

5.4. How far your home from the growth weighing area_____ around (minutes)

5.5. How many times have you attend the growth promotion to have this child weighed? _____

Thank you!!

Data collector name_____ Date of data collection _____Signature_____

Checked by/supervisors name _____Checked date_____

Signature_____

Questionnaire VI: - Resource Inventory check-list

Instruction: This checklist was used to inventor resource includes (human resource, GMP supplies in all selected HPs.

Name of Health post---------- Total population----------

Number of HEWs---------- **Number:** of children enrolled in GMP----------

S no	**Assessment of needed resource availability in GMP service**	YES	NO
1	Does in this HP two trained HEWs available.		
2	Does in this HP catchment area adequate number of HAD leaders available (1HDA to 30 HH) structured.		
3	Does in this HP functional Weighing scale present?		

4		Does in this HP functional weighing bags present?		
5		Does in this HP GMP implementation guideline present		
6		Does in this HP no stock out the child health card in last three months.		
7		Does in this HP GMP registration book present.		
8		HPs having reporting format in the last three months		
9		Does in this HP the GMP secession visited through monthly basis from HC in the last three months		

Thank you!!

Questionnaire II: Direct observation check-list

Growth Promotion Counseling Observation Guide

Introductory remark to the counselor/growth promoter: My name is_____ I am here on behalf of the program to learn about growth monitoring in order to identify areas for program improvement. Please feel free and do not get be worried about my presence since I am not here to judge you. The overall process of your information will be kept confidential and no one will identify you as part of the observation or respondent. Is it ok if I sat in the session where you are involved in counseling of the mothers? When the counselor/growth promoter agrees, I will proceed to the observations.

Consent form between health care provider and care givers

Thank you for visiting our health post for receiving services. Today I will provide you services in collaboration with my colleagues. He is hereby to observe the process and provide additional support which will help me to provide you better services.

Identification and respondents background:

Name of the health post _____

Service intended to be observed: counseling session and messages given to the caregivers by the Health Extension worker.

S.No.	Observation of counseling session when messages given to the caregivers by the HEWs workers	yes	no	remark
1	Does the HEW deliver the counseling messages in line with the triple-A approach**.**			
	step1.Assessed: **Does** HEW measured weight of a child to determine how well the child is growing or not?			
	step2. **Analysis:** Does HEW ask the possible reason for adequate or inadequate growing of that child?			
	step3.**Action:**dose the HEWs provide counseling based on individual child growth monitoring information ?			
2	Does HEW inform to the mother when to return for next GMP session?			
3	Does the HEW ask the mother whether the child supplied vitamin-A?			
4	Does the HEW ask the mother whether the child supplied immunization in schedule?			
5	Does the HEW use the growth chart to record weight of child during the growth monitoring sessions**?**			

Closing: Thanks the health extension workers as well as the client I am finished my observation!!

Document reviewed checklist

From the time of document review the principal evaluator used interview to pathway the documents observation for understand what happened from them and how they reacted to it.

Document review.	**Yes**	**No**		
1. Did all identified severely malnourished children who has lost weight for ≥3 consecutive visits referred to medical/nutrition center during the last 3 months.			≠of identified _____	≠of referred _____
2 Did in this HP all GMP session carried out in monthly scheduled within the last three months?			----------	----------
3 Did in this HP all GMP report sent timely to the next			----------	----------

	level with in the last three months?				
4	Did in this HP all regular community conversation about GMP activity conducted in the last three months?			----------	----------

1. GMP service coverage cheek list

S.No.	Health posts	number of children's recorded(R)(0-23month	Total number of children's estimated (E) (0-23 month)
1	Galessa		
2	Berber		
3	Debatie 02		
4	MembereSelam		
5	Girz		
6	Parzeyit		
7	Zigi		
8	Gipo		
9	Yamp		
10	Kidoo		

Vitamin-A supplementation assessment

S.No	Health posts	number of children's recorded in GMP (6-23month)	Total number of children's(6-23 month)
1	Galessa		
2	Berber		
3	Debatie 02		
4	MembereSelam		
5	Girz		
6	Parzeyit		
7	Zigi		
8	Gipo		
9	Yamp		
10	Kidoo		
Overall(10HPs)			

Full Immunization assessment

S.N	Health posts	number of children's	Total number of children's(12-23

o		recorded in GMP (12-23month)	month)
1	Galessa		
2	Berber		
3	Debatie 02		
4	MembereSelam		
5	Girz		
6	Parzeyit		
7	Zigi		
8	Gipo		
9	Yamp		
10	Kidoo		
Overall(10HPs)			

Closing: Thanks you I am finished my document review!!

Questionnaire III: Key informants interview guide for Health extension workers

Instruction: This tool will be used to assess how the implementation of GMP service carried out at the heath post level and identify what barriers hinder implementation of the service.

Consent form

I want to thank you for taking time to meet with me today. Especially, I would like to talk to you about your experiences participating in the GMP. The interview is one components of our overall program evaluation we are assessing program implementation in order to capture lessons that can be used in future to improve the program. The interview should take 30 -45 minutes. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent.

1. Could you please briefly describe me how do you carry out the GMP service?
    a. Place of GMP practice _____
    b. Eligible for GMP_____
    c. Frequency of GMP_____
    d. Available equipment for measurement of GMP
2. How would you describe?

a. Your working relationship with the local administration?

b. The co-operation between mothers and you as a community health worker?

3. Based on weight measurement (how do you interpret the direction of growth Curve? And what are the possible actions do you recommend? When:
    a. The direction of the growth curve parallel to reference curve
    b. The direction of the growth curve flattened or decreased for the first time
    c. The direction of the growth curve flattened or decreased for the three consecutive time
    d. The direction of the growth curve rises sharply
4. How do GO/NGO members support your activities in growth monitoring and promotion services?
5. Are there under two year children that were not enrolled or recorded for GMP services in your Keble? If so why they don't recorded
6. Are there mothers whose children enrolled and who never attend adequate GMP service? If so why they don't attend?
7. What are the possible factors that influenced among children who enrolled in GMP for they had missed one or more supplementation of vitamin–A and immunization status?
8. Does the proportion of children who attend weighing meeting increased or decreased compare to the same month last year? If so, what are the reasons?
9. What and how frequent do you supervise the activity of GMP service with HDA and other community mobilize?_____
10. What are the barriers to implement GMP?
    - Equipment
    - Supervision
    - Referral system
    - Follow up and feedback
    - Existing organizations assistance

11. In your opinion, what could be done to improve this program?

Interview guide for HDAs

Instruction: The tool will be used to assess how HDAs perceive and plays their role in GMP service. So that indirectly what factors hinder caregivers to attend adequate growth monitoring session at health post level was explored.

Consent form

I want to thank you for taking time to meet with me today. My name is _____from Jimma University Specifically I would like to talk to you about your experiences participating in the GMP program. The interview is as one components of our overall program implementation in order to capture lessons that can be used in future to improve the program. The interview should take 30 -45 minutes. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent.

1. Do you think children benefited from this weighing program?(If yes, how?) (If not, why?)
2. What are some of the activity you contribute in GMP services?
3. What are any resistances to weighing young children in the local culture for the growth monitoring process?
4. In your experience do you consider that the GMP service was well done? On what criteria do you base your evaluation?
5. Do you consider that GMP contributes to improve child growth development? If yes by which mechanisms? If not, what are the conditions according to you should be met?
6. Did/do the parents use the growth chart? Do they find it useful?
7. How frequently do your coordinators communicate or meet with you in order to encourage mothers participating in the GMP session?
8. Are there 0 to 23months children who were not enrolled or recorded for GMP services in your villages? If so why they don't recorded?
9. Are there mothers whose children enrolled and who never attend GMP service? If so why they don't attend?
10. In your opinion what needs to be improved or changed to make all under two year children to be adequately attend GMP session?

Structured Interview Guide for Five Cluster Coordinators (supervisors)

Consent form

I want to thank you for taking time to meet with me today. My name is _____from Jimma University and I would like to talk to you about your experiences participating in the GMP, as one components of our overall program implementation evaluation in order to capture lessons that can be used in future to improve the program. The interview may take less than 15-minutes. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Are there any questions about what I have just explained?

1. Do you feel the HEWs have adequate training? If no, why?

2.DoestheGMPreportbring monthly to the office? If no, why?

1. 3. Do you supervise how the GMPservice being implemented? If no" why? If yes "specify at times ___

4. Do the HEWs referred severe malnourished children who has WFA less than -3 Child Growth Standards) to you monthly? If yes, what case usually do they refer?

5. What do you suggested that should be done for the program improvement?

Interview guide for Health extension supervisor: This tool was used to identify the implementation of GMP service and the hinder factors to implement at the heath post level.

Consent form

I want to thank you for taking time to meet with me today. My name is _____from Jimma University and I would like to talk to you about your experiences participating in the GMP, as one components of our overall program implementation evaluation in order to capture lessons that can be used in future to improve the program. The interview may take less than 15-minutes. All responses will be kept confidential. This means that your interview responses will only be shared with research team members and we will ensure that any information we include in our report does not identify you as the respondent. Are there any questions about what I have just explained?

1. In your experience do you consider that the GMP service was well done? On what criteria do you base your evaluation?
2. What and how frequently do you supervise the provision of GMP service with HEWs, HDAs and other community mobilizes?
3. Does the proportion of children who attend weighing session increased or decreased compare to the same month last year? If so, what are the reasons?
4. In your view what needs to be improved or changed to make the program clients to be adequately attend GMP session?

የአማርኛመጠይቅ

እኔ_____እባላለሁ:የመጣሁትከጅማዩኒቨርስቲበህፃናትእድገትክትትልአገልግሎትአተገባበርላይለሚካሄደዉጥናትመረጃ ሰብሳቢበመሆንነው:

የጥናቱዋናአላማዉየህፃናትእድገትክትትልአገልግሎትአተገባበርዙርያላይመሻሻልእንድከሰትነዉ፡፡በዚህመሰረትአንቺልጅሽንበማ ስመዘገበህፃናትእድገትክትትልአገልግሎትላይያለሽንተሳትፎለማየትበዚህተገኝተናል፡፡ነገርግንበዚህጥናትላይያለሽተሳትፎ /የምትሰጭውመረጃለሌላሶስተኛወገንተላልፎየማይሰጥናተለይቶየማይታወቅመሆኑንእገልፅልሻለሁ፡፡በጥናቱያለሽተሳትፎበፈቃ ደኝነትላይየተመሰረተበመሆኑአንድወይምሁሉንምጥያቄዎችያለመመመለስትችያለሽነገርግንየምትሰጭውመረጃለፖሮገራሙመ ሻሻልይረደዋልእና (15-30) ደቂቃላልበለጠበፈቃደኝነትትሳተፊያለሽብለንእናምናለን፡፡ጥያቄዬንመቀጠልእችላለሁ?

1.አዎ **2.እይደለም**

ክፍልአንድ

1.3. የህፃኑዕድሜበወር_____

1.4. የዕናትዕድሜበአመት_____

1.5. የትዳር ሁኔታ

1. አግብታ የማታውቅ
2. ያገባችናአብረው የሚኖሩ
3. የተፋታች
4. የሞተባት

1.6. የትምህርትደርጃ

1. ማንብብናመጻፍየማትችል
2. ማንብብናመጻፍየምትችል
3. የመጀመረያደረጃ
4. ሁለተኛደርጃ

1.5 የስራሁኔታ

1. የቤትእመቤት
2. የመንግስትሰራተኛ
3. የቀንሰራተኛ
4. ነጋዴ
5. ሌሎች

የቤትሰብቁጥር_____

ክፍልሁለት፡የእናቶችንአመልካከትመጠይቆች

ተቁ.	መጠይቆች	በጣምአልስማማም	አልስማማም	አልዎሰንኩም	እስማማለሁ	በጣምዕስማማለሁ
AT1	በየጊዜውክብደትማስለካትበህፃኑእድገትላይለውጥያመጣል					
AT2	ለእርሶምለህፃኑምበየወሩክብድትማስለካትጠቃሚነው					
AT3	ህፃኑ ክትባት ቢጨርስም የእድገት ክትትሉን ላላቕርጥም					
AT4	የጤናኤክስቴንሽንባለሙያዎችያስትላለፉትመልክትጥሩነበር					
5AT	በየወሩየልጁንክብደትማስመዘንእፈልጋለሁ					

ክፍልሶስት፡የእናቶችንዕውቀትደርጃየሚለኩመጠይቆች

3.1. ስለእድገትክትትልዎትግንዛቤ

1. በየወሩክብደትማስለካት
2. ክትባት
3. የምግብእርዳታንለመከታታል
4. አላውቅም.

3.2. የእድገትክትትልለእነማንዕድሜክልልያስፈልጋል

1. ከሁለትአምትበታችለሆኑህፃናት
2. ከ0-5 ዓመትለሆኑህፃናት
3. ከ6 ወርበላይለሆኑሕፃናት
4. አላውቅም

3.3. በየትኛውእድሜነውህፃናትየእድገትክትትልማድረግያለባቸው

1. እንደተወለዱ
2. ከ6ዎርበሗላ
3. ከ1 ዐመትበሗላ
4. አላውቅም

3.4 የእድገትክትትሉበየስንትጊዜውይሰጣል

1. በየ 1 ወር
2. በየ 3 ወር
3. በየ 6 ወር
4. አላውቅም

3.5. የእድገትክትትልበየትኛውባለሙያነውየሚሠጠው

1. በጤናኤክስቴንሽንባለሙያዎች
2. ነረስ/አዋላጅ
3. ዶክተር
4. አላውቅም

3.6 የእድገትክትልየትዕንደሚደረግታውቂያለሽ

1. አዎ
2. አላውቅም

3.7 የእድገትክትትልካርድለምንእንደሚያስፈልግታውቂያለሽ

1. አዎ 2. አላውቅም

3.8 የእድገትክትትልለማንያስፈልጋል

1. ለጤናማህጻናት
2. የክብደትማነስላላባቸውህጻናት
3. ለሁሉምህፃናት
4. አላውቅም

ክፍልአራት፡የዕናቶችንእርካታየምለኩመጠይቆች

s/n	ጥያቄ	በጣምአላስደሰተኝም	አላስደሰተኝም	አልዎሰንኩም	አስደስቶናል	በጣምአስደስቶናል
8.	በባለዉያዎችአክብሮትእናአገልግሎትምንያክልረክተዋል					
9.	ከዚህመተውባሳለፉትጊዜምንያህልረክተዋል					
10.	ባለሙያዎችባስትላለፉላችሁመልክትምንያክልረክተዋል					
11.	በአገልግሎቱተስማሚነትምንያክልረክተዋል					
12.	ባለሙዎችስራለመስራትባላቸውቁርጠኝነትምንያክልረክትዋል					
13.	አገልግሎቱንለማግኘትየወስደብዎትርቀትምንያክልረክትዋል					
14.	በአገልግሎትመስጫቦታዎትምንያክልረክተዋል					

ክፍል 5፡የሙያአሰጣጥንበተመለከተወጠይቆች

5.1 ለህፃኑእድገትክትትልካርድይዘዋል

1. አዎ2 .አልያዘኩም

5.2 የጤናልማትቡድን (HDAs) አላፊዎችስልእድገትክትትልበየወሩቅስቀሳያደርጋሉ

1. አዎ 1. አያደርጉም 3.እርግጠኛአይደልሁም

5.3 አገልግሎቱንወስድወእስኪወጡምንያክልጊዜወስደብዎት._____ደቂቃ

5.4 የአገልግሎትመስጫቦታውከቤትዎያለውእርቀትምንያክልደቂቃይጨርሳል _____ ደቂቃ

5.5 ዕርስዎልጅዎንለእድገትክትትልአገልግሎትምንያክልጊዜወደአገልግሎትመስጫጣብያወስደዋል፡

አመሰግናለሁ

*መረጃሰብሳቢስምናፊርማ*_____ የተቆጣጣሪስምናፊርማ _____

Meta–Evaluation Checklist:

This checklist is performed to carry out meta evaluations for judging the evaluation study. It is organized by reviewing different meta evaluation literature by independent evaluators.

Title of evaluation document: Evaluation of Growth Monitoring and Promotion Service Implementation at health posts of Debatie district, Benishangul Gumuz Region, Ethiopia, in 20018.

Name of reviewer (Evaluator):_____

It is suggested that each standard be scored on each checkpoint. Then judgments about the adequacy of the subject evaluation in meeting the standard was made in different categories as follows **:** Value obtained is equal to sum of yes divided by sum of items Multiplied by 100%.

It was agreed that an evaluation be used if the overall Judgment parameter scores ≥75% of the check points satisfied, then the evaluation document/procedure was Considered as satisfactory.

If <75% of the check points are not satisfied, then the evaluation document/procedure was considered as unsatisfactory.

The check points and judgment parameter was agreed by the program stakeholders and evaluators.

To which extent the evaluation addressed the issue of Utility, Feasibility Property and Accuracy.

	UTILITY standard		
	Checkpoints	Met	Unmet
1	Clearly identified the evaluation clients and range of individual stakeholders	1	
2	Consulted potential S/holders to identify their evaluation needs.	1	
3	Addressed stakeholder evaluation needs.	1	
4	Engaged evaluators whom the S/holders trust.	1	
5	Obtained sufficient information to assess the program worth and merit.	1	
6	Avoided report technical jargon (brief, simple and direct).	1	
	Total Score	5	1

	Feasibility standard		
1	Prearranged competent staff.	**1**	
2	Avoided attempt to bias or miss apply the finding	**1**	
3	Agreed on editorial dissemination authority		**1**
4	Minimize time demands on program personnel.		**1**
5	Obtained approval for needed evaluation budget.	**1**	
6	Has adequate planning being done to support the evaluation	**1**	
Total Score		**4**	**2**
Propriety standard			
1	Identified program strength to build on and weakness to correct.	**1**	
2	Gave feedback for program improvement.	**1**	
3	Understood the participant values.	**1**	
4	Kept the stake-holder informed with written and contractual agreement.		**1**
5	Kept written and contractual safe-guards against conflict of interest when appropriate evaluation report released or public reviewed.	**1**	
Total Score		**4**	**1**
	Accuracy standard		
1	Described the discrepancy between how the program was intended to operate and how it actually being operated.	1	
2	Described how the people perceived the program existence, importance	1	
3	Engaged independent evaluators to monitor and evaluate the evaluation purposes and producers.		1
4	Provided a detail description about which information will be needed.	1	
5	Checked the accuracy of scoring and consistency of the evaluation measurement.	1	
6	Assessed statistical and practical significance	1	
7	Verified the accuracy of finding by obtaining confirmatory evidence.	1	
8	Trained the data collectors	1	
	Total	7	1

NB: Independent evaluators together with key stake holders agreed on the standards were addressed and as well as they confirmed an evaluation finding to be used. Overall judgment parameter of the check points scored ≥75%. So, the evaluation document/procedure considered satisfactory to be utilized its finding.