ADDIS ABABA UNIVERSITY COLLEGE OF HEALTH SCINCES

SCHOOL OF PUBLIC HEALTH

MASTER OF HEALTH CARE AND HOSPITAL ADMINISTRATION

IMPROVING REFERRAL FEEDBACK FOR PATIENTS TRANSFER FROM OTHER HEALTH FACILITY AMONG HEALTH CARE PROVIDERS IN MEARGE HOSPITAL, TIGRAY REGION NORTHERN ETHIOPIA, 2013.

A FINAL CAPSTONE REPORT SUBMITTED TO ADDIS ABABA UNIVERSITY, COLLEGE OF HEALTH SCIENCE, AND SCHOOL OF PUBLIC HEALTH IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF MASTERS IN HOSPITAL AND HEALTH CARE ADMINISTRATION

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Addis Ababa University College of Health Science

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Capstone Project Submission form

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Full title of the capstone project	Improving referral feedback for patients transfer from other health facility among Health Care Providers in Mearge Hospital, Tigray Region northern Ethiopia, 2013.
Duration of project	May 2013-October2013
Study Area	Mearge Hospital , Western Zone of Tigray, Ethiopia
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Acronyms

AAU Addis Ababa University

ANC Antenatal Care

BSC Bachelor of Science

BPR Business process re-engineering

FP Family Planning

FMOH Federal Ministry of Health

HC Health Centre

HP Health Post

HEW Health Extension Worker

KPI Key Performance Indicator

MCH Maternal and Child Health

PHC Primary Health Care

PCP Primary Care Provider

RCA Root Cause Analysis

RRA Rapid Referral Assessment

VCT Voluntary Counselling and Testing

Summary

Background: A referral system is the interrelationships and coordination of patient care services from one health care facility to another and then back to the referring facility/Discharge. Essentially, the referral process has two parts. The first part begins by the referring health professional communicating relevant patient information to the receiving health professional. The second part involves the receiving health professional communicates back to the referring health professional with information and plan for continuum of care (referral feedback). And once the care is completed, the receiving unit shall return the patient back to referring unit with timely referral feedback. This system is not practiced in Mearge Hospital and uniformly.

The General objectives: Assessment of factors influencing in providing referral feedback among health care provider in Mearg Hospital, in Western Zone, of Tigray Region, Northern Ethiopia .

The importance of a good referral system increases the efficiency of the health system by maximizing the appropriate use of health care facilities. It strengthens the peripheral health facilities and improves the decision making capacity of professionals at the lower level of the referral network. It also creates opportunities for balanced distribution of funds, services and professionals while at the same time improving the effectiveness of the health system. In addition, a good referral system helps to promote cooperation among primary, secondary and tertiary levels of care.

Methodology: A pre-post intervention study to examine percentage of patients referred to Mearg Hospital was provided with referral feedback when referred back to the referred unit or when to discharge.

Introduction

1. The health facility

Mearge Hospital is a general hospital located in Tsegede Wereda, Western Zone of Tigray Region, located 934 km north of Adds Ababa. It has 70 operational beds and an estimated catchment area of more than one million, receiving patients from one primary Hospital, 6 health centers and 14 health posts. The hospital provides both preventive and curative health services, including Outpatient, in patient, Delivery, Surgery, Laboratory, ANC and Family planning. In 2012/2013 fiscal year there were 42,800 outpatient, 2080 inpatient admissions and average length of stay 4.8 days.

Currently the hospital has 162 employees, including 85 health professionals, and 77 supportive staff.

Table 1: Number of employs by deferent profession in Mearge Hospital Tigray region northern Ethiopia 2013

Clinical employees	85
Doctors(GP 3, Spe, 0)	3
Bsc nurse	7
Clinical nurse	44
Pharmacist	2
Pharmacy Technical	8
Laboratory technologist	7
Midwifes	7
Other	7
None clinical	77
Administrative	17
Cleaner	15
Medical record	9
Runner	6
Security	6
Laundry	5
Other	19
Total	**162**

2. Problem statement

‘‘The referral feedback in Mearge Hospital is low.’’

Out of the 68 patients referred to Mearge Hospital, from October 2012 to December 2012, no referral feedback was provided.

The important of a good referral system increases the efficiency of the health system by maximizing the appropriate use of health care facilities. It strengthens the peripheral health facilities and improves the decision making capacity of professionals at the lower level of the referral network. It also creates opportunities for balanced distribution of funds, services and professionals while at the same time improving the effectiveness of the health system. In addition, a good referral system helps to promote cooperation among primary, secondary and tertiary levels of care.

Essential elements of a referral system

- A group of organizations that in aggregate provide comprehensive health care services in a defined geographic area
- A unit that coordinates and oversees referral activities
- Designated referral focal persons at each health facility
- Directory of services and organizations within a defined territory
- Standardized referral format
- Feedback loop to track referral
- Documentation of referral feedback given.

The health service organization that initiates the referral process is the referring unit. The health service organization that receives patients from referring units is the receiving unit. The receiving unit ensures required care is provided to the patients. And once the care is completed, the receiving unit shall return the patient back to referring unit with referral feedback. Depending on circumstances a facility can be both referring and receiving. Effective referral system between different levels of health care delivery represents a cornerstone in addressing patients’ health needs. Ideally, the primary health care (PHC) centres are supposed to be the point of first contact for patients. From PHC centres referral to the secondary and tertiary levels should follow a timely, smooth and organized process.

A number of factors specific to the particular context of a country’s health system will also influence the appropriate balance between referral hospitals and lower levels of care. These

factors are especially important in considering the appropriateness of plans to change the balance of care between levels. Broadly, they can be summarized as follows.

The three factors are closely interrelated. If primary health care and district hospital services are weak, cutting resources for referral hospitals without destabilizing the system will be more difficult. In such circumstances, rapid rebalancing of resources is unlikely to be

Possible because careful efforts will be required to develop lower-level services first, while Still maintaining the referral service. Where lower-level services are strong, devoting relatively fewer resources to referral hospitals may well be possible. However, even though an effective district health system will be able to treat a large proportion of patients at lower levels of care, it will also be better able to identify patients who require referral for more complex care and, thus, may generate a greater appropriate demand for referral hospital care

3. Objective

3.1 General Objective

To improve percentage of referral feedback provided by the health care provider in Mearge Hospital.

3.2 Specific objective

- To identify factors influencing the provision of referral feedback
- To improve the percentage of referral feedback from 0% to 80% by July 2013.

4. Root cause analysis (RCA)

4.1 Collecting information

Discussion was done to identify possible reasons that determine referral feedback to those patients referred to Mearg Hospital with, medical director, some staff members from outpatient, emergency, delivery and lesion officer. The generated ideas from a participant , the referred patient not examined by better qualified health professional the referral in are not registered all, the referred health institutions were not using standard referral format, there is no Liaison officer hence no follow-up, low relationship With H/Cs, Not standard Registration and Not attached referral paper in the patient folder.

Some possible root causes suggested by the participants were summarized in the fish bone diagram (figure 1).

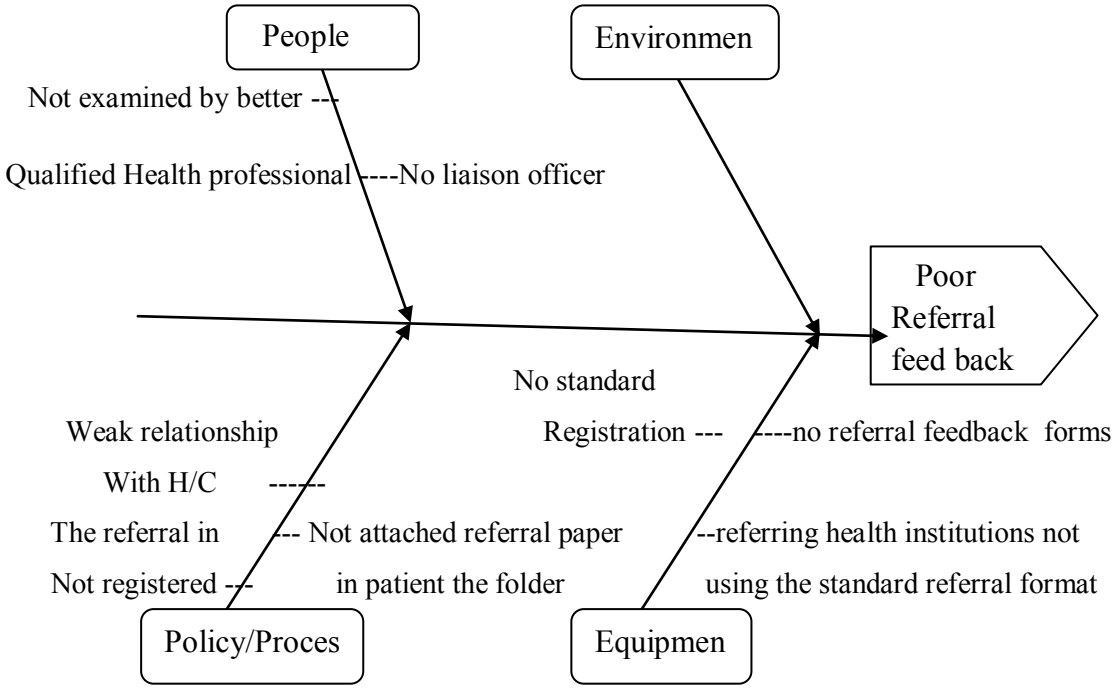

Figure: 1 The generated idea that cause provision referral feedback among health professional in Mearge Hospital, Tigray region northern Ethiopia, 2013.

After discussion with staff members data were collated and further assessment was conducted to identify the root cause.

1. **Received referral patient not examined by better qualified health professional**:

The practise in the triage room was all received referral patient seen as new and they send to any health professionals on duty at the out Patient department(OPD), that is it my seen by physian, degree nurse or health officer. So the nurse and health officer my not give feedback because they have the same level with referred health professional. The reason is the referral we received from health centre and the higher health professional in the health centre is degree nurse or health officer .

2. Referral in are not registered all :

To check the referral in registration practise, this practise also observed in the triage room so had no registration system in triage and outpatient department (OPD), except emergency and maternity that means no lesion officer, even the medical Director and Mtron they don't know how many patient referral in. so this is a problem

3. Not attached referral paper in the patient folder:

Out 68-registered received referral, 23.5% attached the referral paper in the patient medical record.

4. There was no Liaison officer hence no follow-up:

A liaison officer is a person that liaises between groups or units of organizations to communicate and coordinate activities. Generally, they are used to achieve best utilization of resources. According to the BPR document the qualification of a liaison officer should be Diploma or above in health science, social science or information science. A dedicated person with a high level of commitment, good communication skill and skilled to use electronic communication. Were also needed.

Our SMT and HRM did not know the role and responsibility of a liaison officer so despite we have an assigned person, the duties of liaison officer was not fulfilled in mearge hospital.

5. No standard referral feedback form:

A standard referral feedback form was not available to health care providers; it de-incentivized health care providers to write referral feedback.

6. Week relationship With Health centre(H/C):

To check the relationship With Health centre(H/C) I discuss with medical director and matron so here is no supportive relationship mechanism or communication with catchment health facilities or H/Cs. So this is one cause for low referral feedback in our Hospital.

7. Referred health institutions were not using standard referral format:

Upon chart auditing, out of the 68 patients who were referred in and registered, 18 (26.5%) of them were referred to our facility for treatment without a proper referral from the referring health facility.

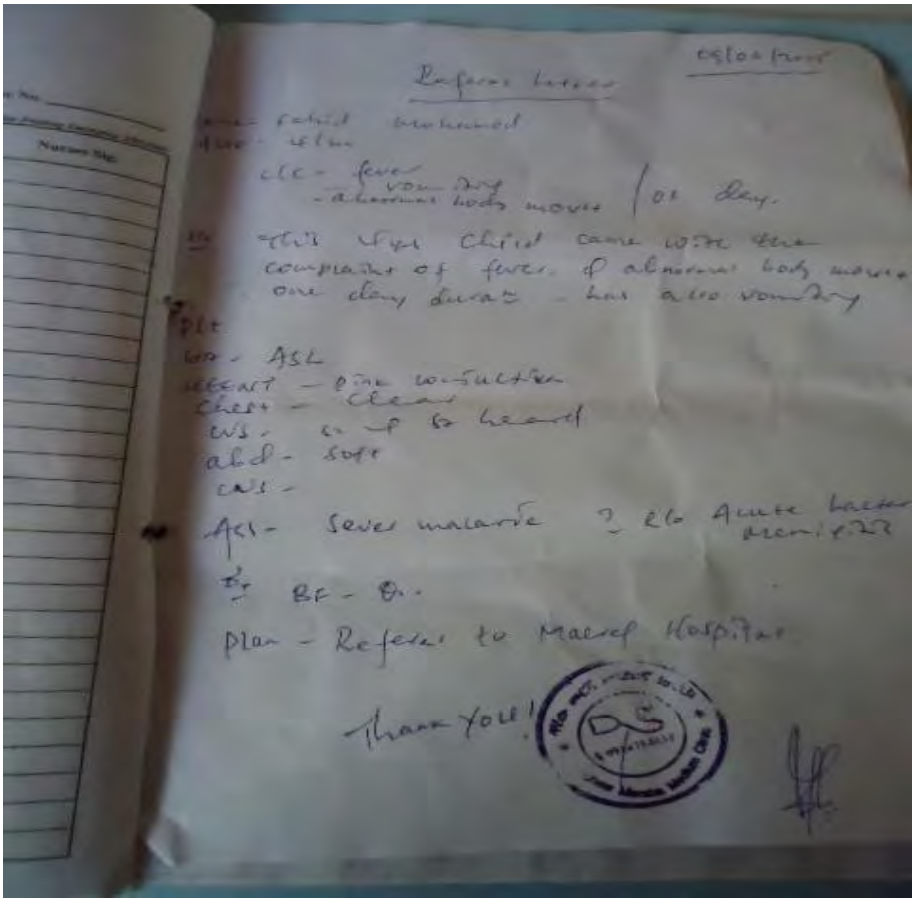

Figure: 2 Sample not standard referral paper received from referring health facility in Mearge Hospital, Tigray region northern Ethiopia, 2013.

8. Not standard Registration:

Standard referral registration was available but with the exception of emergency and maternity room, there was no registration system in the OPD triage area. There is no documentation to effectively record the number of patients who were referred in

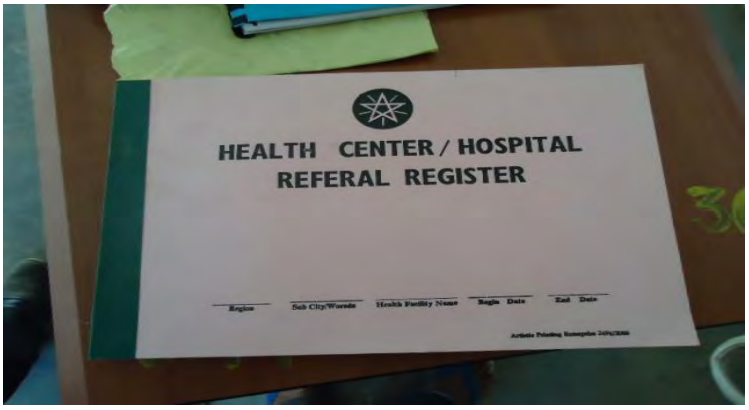

Figure: 3 Sample of standard registration book in Mearge Hospital, Tigray region northern Ethiopia, 2013.

5. Literature review

Referral is a process by which a health worker transfers the responsibility of care temporarily or permanently to another health professional or social worker or to the community in response to its inability or limitation to provide the necessary care. Referral can be vertical as in the hierarchical arrangement of the health services from the lower end of the health tier system to the higher ones. It also can be horizontal between similar levels of facilities in the interest of patients for cost, location and other reasons. Referrals can also be diagonal when a lower level health facility directly refers patients to a specialized facility without necessarily passing through the hierarchical system(2).

A referral system entails the interrelationships and coordination of patient care services from one health care facility to another. Essentially, the referral process has two parts. The first the referral part of the referral process begins by the referring health professional communicating relevant patient information to the receiving health professional. The second part involves the receiving health professional communicates back to the referring health professional with information and plan for continuum of care (referral feedback) (2).

A proper referral system can provide data and knowledge about the different aspects of the health system (3). A number of factors specific to the particular context of a country's health system will also influence the appropriate balance between referral hospitals and lower levels of care. These factors are especially important in considering the appropriateness of plans to change the balance of care between levels. Broadly, they can be summarized as follows.

- •capabilities of lower levels
- •availability of specialized personnel, and
- •training capacity, organization, and needs

The three factors are closely interrelated. If primary health care and district hospital services are weak, cutting resources for referral hospitals without destabilizing the system will be more difficult.

Where lower-level services are strong, devoting relatively fewer resources to referral hospitals may well be possible. However, even though an effective district health system will be able to treat a large proportion of patients at lower levels of care, it will also be better able to identify patients who require referral for more complex care and, thus, may generate a greater appropriate demand for referral hospital care (4). Each hospital should establish a referral service coordinator that lists facility to/from which patients can be referred or

received and service available at each facility (the referral network). The contact details of each facility in the referral network should be documented. The criteria for receiving and referring patients to each facility should be also be documented and agreed between all facilities participating in the network. Standardized referral and feedback formats should be used by all facility participating in the network (5). Providing feedback to the referral sources is an important factor in sustaining referrals to the secondary providers. Providing feedback in a time manner and in a format that is most likely to be useful to primary referral sources is critical (5).

For every referral event, there must be a referral feedback. Once the reason for referral has been resolved, the patient must be referred back to the referring for follow-up. The referral feedback must be completed with as much information as necessary for the adequate care of the patient. In case of death of the patient, the referral feedback form should reflect the cause of death (6).

Referral is quite common among both facility-based and community-based providers, and is understood as sending clients to seek care at higher level health care facilities, most hospital, and sending clients back down the referral for treatment, care or support at lower levels of the formal health care system. Primary care providers are the usual point of first contact for new patients seeking medical care. Approximately 4.5% of patient visits to a primary care provider result in a referral to a specialist. The study of physician referral patterns and their correlates is important because referrals can have significant effects on medical costs, quality of care, and access to the health system (7-8).

A district hospital or health centre serve as the first referral level of services. A referral system is an important on-going effort to connect patients between health care providers and ensures they receive the necessary care and thus improving the quality of care for the patient through better coordination and management of services between facilities. Rapid referral assessment (RRA) is tool to assist national and district level manager to rapidly assess the status and constraints to referral from first level care to secondary and tertiary level (11-13).

All hospitals should have a designated telephone line for emergency referral or contacts, the indication for referral should be for, the need of medical care not available in the referring facility, non availability of hospital bed, ineligibility for treatment in the referring facility and Preference of the patient (14).

A well-functioning referral system is fundamental to primary health care (PHC) delivery. Through referrals, primary care facilities save lives and provide proper responses to emergency situations, they do this by helping people obtain access to higher levels of care, particularly at the district level. Evidence has shown that intervention aimed at improving the referral system should concentrate on improving referral appropriateness rather than controlling the referral rate. Assessing and understanding the provider's referral decision making process become critical. Findings from developed countries have shown that a complex mix of patient, provider and organization characteristics determines a referral decision. In the developing world, very few published studies are available. Previous studies have mainly focused on the appropriateness of hospital admissions (15).

6. Methodology

6.1 Project setting

The study will be conducted in Mearge Hospital between May 2013 and July.

6.2 Study design and sample

A pre-post intervention study to examine the percentage of patients who were referred to Mearge Hospital received referral feedback when referred back to the referring unit.

6.2.1 Source of population

A patient coming to Mearge Hospital for service seeking in the study period

6.2.2 Study population

The study population were on all received and registered patient with referral paper in Mearge Hospital during pre and post intervention.

6.2.3 Study unit

All referral patient received with referral paper and registered in the referral in log book

6.2.4 Data collection and measures

A chart audit to all referred patients when care is completed was conducted to calculate the percentage of completion of referral feedback forms and checklist was prepared to collect the information during chart auditing. The baseline data was conducted in April 2013 and post-

intervention data were repeated in August 2013, three months after implementation. The numerator is the number of referral feedback forms completed and the denominator is the number of referred patients who were discharged.

6.2.5 Data quality assurance

The reliability of the items in the check list was tested and revised; two data collectors were trained on the data collection process (liaison officer, HMIS focal person) and during the actual data collection process check the data collectors by randomly taking medical records with the checklist.

6.3 Data analysis

A Ethiopian hospital key performance indicator/KPI/ formula was used to analyse the difference between the pre-post intervention change in percentage the pre-post intervention change in percentage of referral feedback given(KPI 41) (excel and manual).

- The numerator: number of referral feedback forms completed (Q65)
- Denominator: number of referred patients who were discharged (Q66)

KPI 41=Q65/Q66*10

6.4 Ethical consideration

Approval was obtained from Research and Ethical committee of Addis Ababa University, School of Public Health and Supportive letters from Mearge Hospital senior management team.

6.5 Dissemination of results

Result will presented to Addis Ababa University (AAU) College of Health Science and will be presented to the Hospital senior management team and Tigray Heath Bureau

7. Intervention

Strategic options:

- *All received referrals patient examined by better qualified higher health professionals*
- *All referral will be registered*
- *Provide timely feedback by using the standard referral format*
- *Liaison officer must be functional*
- *Strengthen the relationship between the hospital and health centres by improving all means of communication mechanism*
- Attached referral paper patient in folder
- Prepare standard referral feedback format

In Ethiopia, the health system is reorganized in three-tier system. The primary Health care In Primary level constitutes health post, health centre, and primary Hospital (HSDP IV). Accordingly, Mearge Hospital currently serves as a general Hospital. It is expected to receive referrals from primary Hospital and health centres. Therefore, to describe factors influencing to provide referral feedback and how gets service for receiving referral patient. In Mearge Hospital we have three physician, not seen all patient by physician we have degree nurse (BSC) in outpatient. The physician works as a consultation inpatient, outpatient and maternity. The target what I take an intervention was, in Ethiopian Hospital key prformenance indicator(KPI) Tigray regional health bureau, had additional KPI from these KPI: 41 (says)referral feedback given, is the additional KPI, which had zero report in Mearg Hospital Except emergency and maternity the receiving referral patient seen as a new patient almost by the same health profession with the health centre not consider the referral paper as consultation and Mearg Hospital not known how many referral receive, monthly, quarterly and annually and not registered all except emergency and maternity.

So we assess patient get the service as needed or not because expectation for referred patient to be seen by higher profession to get better management. In addition, it needs assessment the content of the referral paper is it helpful and understandable, full and clear information that means is it important for the care and treatment we given. It must be clear the problem, action taken and reason to refer. For quality of care and for the feedback provided is other mandatory means.

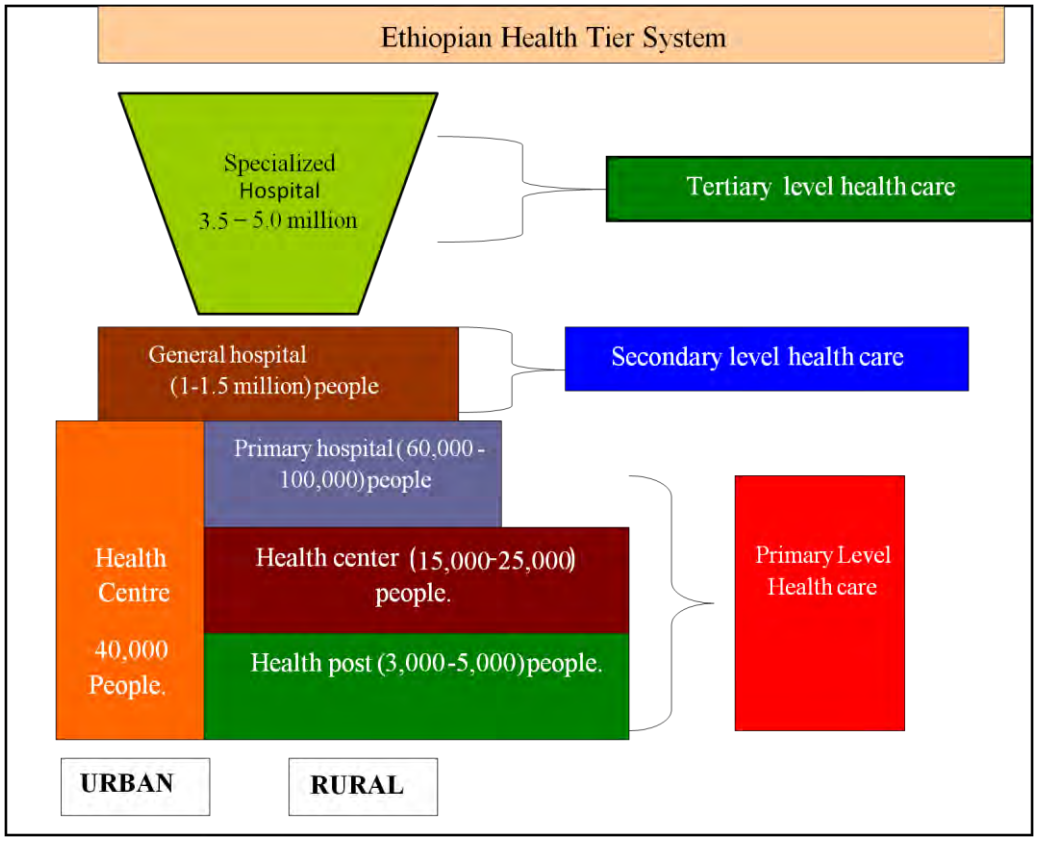

Figure: 4 New health policy tier system Ethiopia, 2011

Comparative analysis of strategic options

Tool: Decision matrix

- The criteria depend on what is most important to our decision and are used to guide decision making

Table: 2 Quantitative decision matrix comparative of strategic options, to improve referral in Mearge Hospital, Tigray region northern Ethiopia, 2013

Strategic options	Evaluative criteria(5=good,1=bad)				
	Impact	Expense	feasibility	Time	Total
1:All received referral seen by higher health professional and give feedback	5	4	4	3	16
2: All referral in registered	5	4	3	3	15
3.Prepare standard referral feedback format	5	4	3	3	15
4: Liaison officer must be functional	5	4	4	4	17
5:Strengthen the relationship by communication and given feedback	4	4	3	3	14
6. Not attached referral paper in the patient folder	5	4	4	4	17

The best strategy

From decision matrix comparative selected the best strategy to improve for providing referral feedback, according the score, feasibility, time and impact.

Combination strategy:

- Liaison officer must be functional
- Attached referral paper in the folder
- Prepare standard referral feedback format

The intervention begin in May 2013, included ensuring the liaison officer understand the roles and responsibilities. The responsibilities of liaison officer, coordinating over all referral these are facilitate ambulance service for emergency referral, record and report the referral activities to facility management, compile, analyze, and interpret referral data to improve the referral service, ensure feedbacks are sent back to referring health facility lastly, monitor and evaluating the referral service provided.

The hospital also ensured the availability of a standardized referral feedback forms. The liaison officer would register all patients referred to the hospital. In order to facilitate the use of the referral feedback forms, the liaison officer will attach a referral paper and a blank referral feedback form to the patient's medical record. Upon discharge, the liaison officer must follow up with health care providers to ensure the referral feedback forms were completed, collect, document the copy and sent to the referring facility.

8. Result

68 patients were registered as referred patients in our baseline data. 16(23.5%) had a referral form attached to medical record. None of the 68 medical records contained completed referral feedback from upon discharge (0%). Post intervention data were collected in August 2013. A total of 76 referred patients were registered. All patients had referral paper (100). 59 of the 76 discharge patient's medical records contained the completed referral feedback forms (76.6%) (See table: 2).

Table: 3 Result in pre and post intervention that provision of referral feedback, in Mearge Hospital, Tigray region northern Ethiopia, 2013.

	Pre-intervention	post –intervention	change
N	68	76	
Referral feedback given	0(0%)	56(76.6)	76%
No referral feedback given	68(100%)	17(23.4%)	

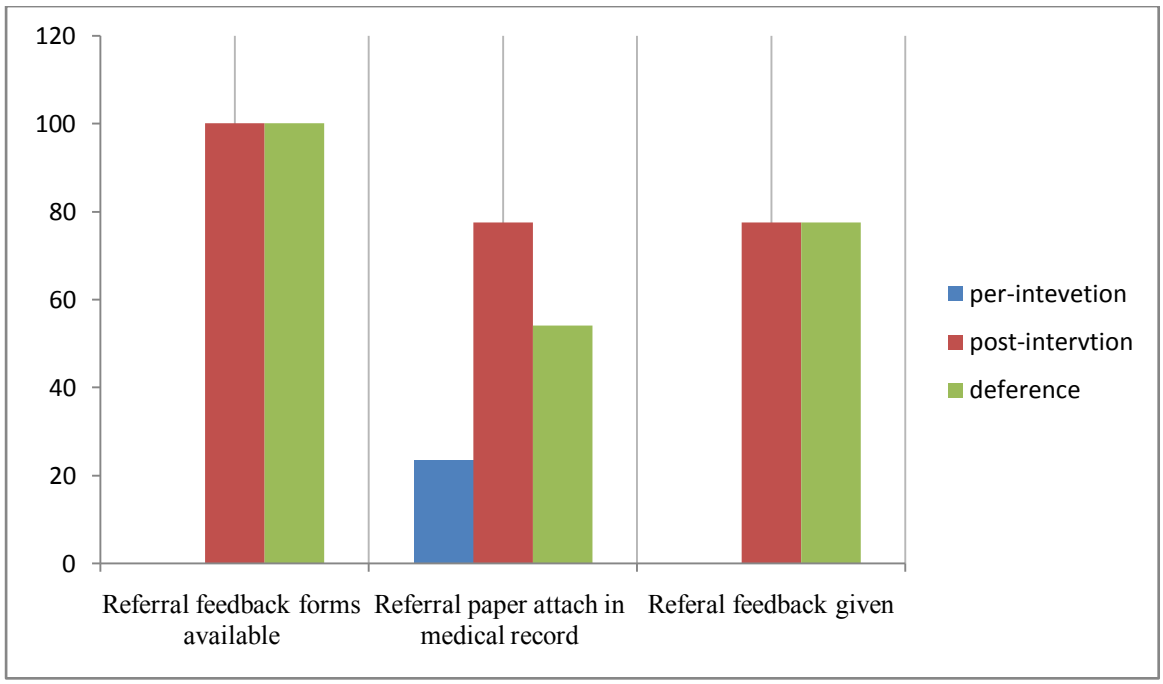

Figure: 5 Result in pre and post intervention of referral feedback given, in Mearge Hospital, Tigray region northern Ethiopia, 201

9. Discussion

We found the intervention accomplished improvement on the provision of referral feedback from 0% to 76.6%. The intervention can facilitate better patient referral information in turn improve quality of patient care and improve resources utilization. In addition to that, the intervention result increased the knowledge of the function of liaison officers. The liaison officer registered patients, collects the referral papers, attached the referral feedback forms, and follows up with physician, collect the completed referral feedback and send the original copy to the referring facilities. The entire process was managed. Additional benefit of having the liaison officer following the patient facilitates the communicate with other facilities.

According to the study conducted on notional referral system policy, guideline, and protocol of Belize, June 2006, (5) the referring physician will communicate by telephone with the receiving physician /health facility/ to ensure advance notice of the referral is given and that the patient is expected. If possible, the referral form will be faxed to; the receiving unit prior to information must be complete and accurate: and the following information must be complete and accurate:

a. Full name

b. Unique identifier number (MRN)

c. Address and phone number of patient

d. Next of kin or Person Responsible in cases involving minors – (name, Address and Telephone Number)

e. Date and hour of referral

f. Date of birth, age and sex of patient

g. Reason for Referral

h. Diagnosis if known

I. Treatment Given, Patient's Vital Signs

j. Name of Physician or Provider who refers

k. Signature

l. Clinic or unit that refers.

m. Patient Information/health education

n. All relevant diagnostic results

The study conducted in Mearge Hospital also similar with Belize. Mearg Hospital should establish a referral service coordinator that lists facility to/from which patients can be referred or received and service available at each facility (the referral network). The contact details of each facility in the referral network should be documented. The referred health facilities communicate with the liaison officer of Mearg Hospital by telephone before the patient referred because you have to check the service available or not, it helps to take other action for patient life saving. On other hand Mearg Hospital, Standardized referral and feedback formats should used and by all facility participating in the network /communicating with Mearg Hospital/. Standardized form means all the information needed in referral and feedback forms were complete. When patient was referred in with referral paper liaison officer can follow up with the referring facility. All these activities improve after intervention in Mearg Hospital.

The intervention did require standard registration and referral feedback forms. Hospitals should budget this expenses accordingly.

The study conducted in Iraqi Kurdistan(1) on effective referral system /communication/ between different levels of health care facility represents a cornerstone in addressing patients' health needs. The study that conducted in Mearg Hospital also addressed to improve the effectiveness.

The criteria for receiving and referring patients to Mearg Hospital should also be documented and agreed between all facilities participating in the network. So know good communication between

Mearg Hospital and the referring health facilities during receiving and when to referring back to the referred facilities.

Upon reception of a patient responsibility for the patient's care is transferred to the receiving unit. The patient will be duly assessed, and the necessary action /interventions will be taken under the responsibility of the receiving unit.

A study also conducted in, Belize June 2006, (5) providing feedback to the referral sources is an important factor in sustaining referrals to the secondary providers. That is providing referral feedback to referring facilities /health professional it helps to write referral with full information which includes in the referral paper as a result it helps also to the receiving providers for proper diagnosis, treatment and lastly to write feedback. So after this study conducted in Mearg Hospital all the process addressed.

According to the Ethiopian referral system guideline 2010,((2) the receiving facility responsibilities also conducts situation analysis of the current referral process to identify gaps and strengths

- Assigns referral coordinator with clear roles and responsibilities
- Devises follow up plans and ensures the plans are communicated to the referring facility /professional
- Ensures staff at points of entry clearly understand the referral process
- Provides continuing education about the referral process to staff and the community
- Ensures referred patients are seen by appropriate professionals
- All investigations and documents attached with the referral form from the referring facility should be considered to protect patients from unnecessary cost
- Ensures that all prescheduled referrals are attended without delay

On the other hand the referral coordinator should responsibilities for both referrals out and received referrals, facilitates scheduling based on the level of priority for consultation, i.e. emergency, urgent and routine cases, utilizes the following communication methods: letter, telephone, email, photocopied reports sending, personal contacts, etc and ensures the availability of service or professionals at the receiving health facility before referral and facilitates transportation for emergency cases.

After this study conducted in Mearg Hospital the responsibilities of the hospital for receiving referral was conducted and the management ensuring and sensitization was done to create awareness for all staff and also assigns liaison officer with clear role and responsibility you were coordinate all the activities related with referral.

This study also conducted responsibilities of receiving health professional, responds promptly to consultation requests, reports in detail all pertinent findings and recommendations to the referring health worker and may outline opinion to the patient (feedback with all required information and recommendation) and communicate with the patient or family.

After this study conducted provision of referral feedback was improved. That is good communication with the referring or catchment area health facilities. Liaison officer coordinated all referral activities, referring health facilities used standard referral format, the problem used un proper referral paper was solved do to daily communication with the liaison officer and by giving feedback from the Hospital. So there is strong relationship with the catchment area health facilities.

The other important of the study was increasing the quality of care for the patient which received by referral. That means referral patient seen /examine /by higher health professional as a consultation and liaison officer follows to the examiner to write feedback including recommendations. In situations in which eliminating non referred patients is impossible, a queuing system needs to be designed to separate the referred from the non referred so that referrals can be fast tracked. And also the beg importance of this study was conducted an agreement with catchment area health facilities had every quarter meeting to strength the referral communication, to fill the gap between referring and receiving facility. This is a continues process to sustain of the project.

10. Strength and Limitation of the study

Strength

- Service providers were included in the discussion; helps to improve the services and to know the job liaison officer
- Liaison officer knows the national referral system protocol
- Improve quality of data documentation in referral

Limitation

- Communication challenge: telephone, internet
- Lack of reference and literature

11. Conclusion

- ✓ A system of ensuring accountability will be in place to ensure the proper functioning of the referral process
- ✓ Communication on the referral process is vital to the proper functioning of the referral system and utilizing all the available services
- ✓ To continue the improvement that comes by this project on referral feedback accountability of the both referring and receiving are mandatory

12. Recommendation

- ✓ The Hospital will have a focal person for referral to coordinate the overall referral activities within the health facility, include:
  - Record and report the referral activities to facility management
  - Compile, analyze, and interpret referral data to improve the referral service
  - Ensure feedbacks are sent back to referring health facility

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Annexe: 1 check list pre intervention collected data

s.n	Medical record number /MRN/	Date of received	Attached referral paper Yes/No	Referral feedback complete Yes/No
1	045731	19/02/2005 E.C	Yes	No
2	045964	24/02/2005 E.C	Yes	No
3	045968	24/02/5005 E.C	No	No
4	045907	22/02/2005 E.C	Yes	No
5	045971	25/02/2005 E.C	Yes	No
6	046006	26/02/2005 E.C	Yes	No
7	046033	26/02/2005 E.C	Yes	No
8	046034	27/02/2005 E.C	Yes	No
9	046066	27/02/2005 E.C	Yes	No
10	046138	29/02/2005 E.C	No	No
11	046950	7/03/2005 E.C	Yes	No
12	046454	7/03/2005 E.C	Yes	No
13	046506	10/03/2005 E.C	Yes	No
14	046545	11/03/2005 E.C	No	No
15	046875	22/03/2005E.C	No	No
16	046887	23/03/2005E.C	No	No
17	047063	27/03/2005E.C	Yes	No
18	047117	28/03/2005E.C	Yes	No
19	047962	28/03/2005E.C	Yes	No
20	047968	29/03/2005E.C	Yes	No
21	024770	29/03/2005E.C	Yes	No
22	048046	04/04/2005E.C	Yes	No
23	048046	04/04/2005E.C	Yes	No
24	048133	08/04/2005E.C	Yes	No
25	048134	08/04/2005E.C	No	No
26	048162	09/04/2005E.C	No	No
27	048442	21/04/2005E.C	Yes	No
28	048731	23/04/2005E.C	Yes	No
29	048675	24/04/2005E.C	Yes	No
30	048833	24/04/2005E.C	No	No
31	047458	26/04/2005E.C	Yes	No
32	047859	27/04/2005E.C	Yes	No
33	049486	29/04/2005E.C	Yes	No
34	029662	30/04/2005E.C	Yes	No
35	022997	25/04/2005E.C	No	No
36	048861	27/04/2005E.C	No	No

s.n	Medical record number /MRN/	Date of received	Attached referral paper Yes/No	Referral feedback complete Yes/No
37	048854	27/04/2005E.C	Yes	No
38	048879	28/04/2005E.C	Yes	No
39	048869	28/04/2005E.C	Yes	No
40	049029	28/04/2005E.C	Yes	No
41	049065	28/04/2005E.C	Yes	No
42	049255	29/04/2005E.C	Yes	No
43	099271	29/04/2005E.C	Yes	No
44	043309	15/02/2005E.C	Yes	No
45	045322	16/02/2005E.C	No	No
46	022150	16/02/2005E.C	No	No
47	048037	03/04/2005E.C	No	No
48	048072	06/04/2005E.C	Yes	No
49	048167	09/04/2005E.C	Yes	No
50	048282	16/04/2005E.C	No	No
51	047924	28/04/2005E.C	Yes	No
52	046353	05/03/2005E.C	Yes	No
53	046483	10/03/2005E.C	No	No
54	035452	10/03/2005E.C	No	No
55	046779	19/03/2005E.C	No	No
56	046813	20/03/2005E.C	Yes	No
57	046819	20/03/2005E.C	Yes	No
58	042841	23/03/2005E.C	Yes	No
59	046978	25/03/2005E.C	Yes	No
60	047005	26/03/2005E.C	Yes	No
61	046958	26/03/2005E.C	Yes	No
62	047028	27/03/2005E.C	Yes	No
63	047437	10/03/2005E.C	Yes	No
64	047481	11/03/2005E.C	Yes	No
65	047501	13/03/2005E.C	Yes	No
66	047653	18/03/2005E.C	Yes	No
67	047689	19/03/2005E.C	Yes	No
68	047874	26/03/2005E.C	Yes	No

Annex 2 check list post intervention collected data

s.n	Medical record number (MRN)	Date of patient Received	Attached referral paper Yes/No	Referral feedback complete Yes/No
1	050130	01/09/2005	Yes	No
2	050141	01/09/2005	Yes	No
3	050268	04/09/2005	Yes	No
4	050290	05/09/2005	Yes	No
5	050734	07/09/2005	Yes	No
6	050965	07/09/2005	Yes	No
7	050986	07/09/2005	Yes	No
8	051300	08/09/2005	Yes	No
9	051323	09/09/2005	Yes	No
10	051366	12/09/2005	Yes	No
11	051570	16/09/2005	Yes	No
12	051587	17/09/2005	Yes	No
13	051858	26/09/2005	Yes	yes
14	051884	27/09/2005	Yes	yes
15	050500	27/09/2005	Yes	yes
16	050965	28/09/2005	Yes	yes
17	050975	28/09/2005	Yes	yes
18	050974	28/09/2005	Yes	yes
19	051971	29/09/2005	Yes	yes
20	027477	30/09/2005	Yes	yes
21	052011	01/10/2005	Yes	yes
22	035018	01/10/2005	Yes	yes
23	051227	04/10/2005	Yes	yes
24	052073	04/10/2005	Yes	yes
25	052020	04/10/2005	Yes	No
26	022415	05/10/2005	Yes	No
27	024538	07/10/2005	Yes	No
28	011378	07/10/2005	Yes	No
29	027626	10/10/2005	Yes	yes
30	052331	12/10/2005	Yes	yes
31	052409	14/10/2005	Yes	yes
32	052449	15/10/2005	Yes	yes
33	042378	16/10/2005	Yes	yes
34	052529	17/10/2005	Yes	yes
35	052507	17/10/2005	Yes	yes
36	052513	17/10/2005	Yes	yes
37	052514	17/10/2005	Yes	yes
38	052534	18/10/2005	Yes	yes
39	052536	19/10/2005	Yes	yes

s.n	MRN	Date of patient received	Attached referral paper Yes/No	Referral feedback complete Yes/No
40	052593	19/10/2005	Yes	yes
41	052626	20/10/2005	Yes	yes
42	052666	21/10/2005	Yes	yes
43	052020	21/10/2005	Yes	yes
44	049691	21/10/2005	Yes	No
45	052717	22/10/2005	Yes	yes
46	052725	22/10/2005	Yes	yes
47	052728	23/10/2005	Yes	yes
48	052739	24/10/2005	Yes	No
49	023283	24/10/2005	Yes	No
50	052837	25/10/2005	Yes	yes
51	052666	27/10/2005	Yes	yes
52	052925	29/10/2005	Yes	yes
53	052988	01/11/2005	Yes	yes
54	053145	05/11/2005	Yes	yes
55	039189	05/11/2005	Yes	yes
56	053156	05/11/2005	Yes	yes
57	053166	06/11/2005	Yes	yes
58	038657	07/11/2005	Yes	yes
59	053100	10/11/2005	Yes	yes
60	053265	10/11/2005	Yes	yes
61	053294	11/11/2005	Yes	yes
62	053405	15/11/2005	Yes	yes
63	040660	16/11/2005	Yes	yes
64	053267	16/11/2005	Yes	yes
65	042378	16/11/2005	Yes	yes
66	053673	18/11/2005	Yes	No
67	053698	19/11/2005	Yes	yes
68	053751	19/11/2005	Yes	ye
69	053868	21/11/2005	Yes	yes
70	053863	24/11/2005	Yes	yes
71	054065	24/11/2005	Yes	yes
72	014454	25/11/2005	Yes	yes
73	053989	28/11/2005	Yes	yes
74	040919	28/11/2005	Yes	yes
75	054362	29/11/2005	Yes	yes
76	049691	30/11/2005	Yes	yes

Annexe: 3 Mearg Hospital Patient referral form

<table>
<tr><td>From(referring facility)</td><td colspan="5"></td></tr>
<tr><td>Address of health facility</td><td colspan="5"></td></tr>
<tr><td>arrangements made</td><td>Yes</td><td>No</td><td>Tel No:</td><td colspan="2">Fax No:</td></tr>
<tr><td>To(receiving facility)
Receiving health professional</td><td colspan="3" rowspan="2"></td><td colspan="2">Date :
MRN:</td></tr>
<tr><td>Patent’s Name address</td><td colspan="3"></td><td>Sex</td><td>M</td><td>F</td></tr>
<tr><td>Date of birth …… age ……..</td><td colspan="3"></td><td colspan="3"></td></tr>
<tr><td colspan="6">History ----------

----------</td></tr>
<tr><td colspan="6">Findings ----------
----------</td></tr>
<tr><td colspan="6">Treatment given:</td></tr>
<tr><td colspan="6">Reason for referral:</td></tr>
<tr><td colspan="2">Name of professional and telephone number</td><td colspan="2"></td><td colspan="2">Signature</td></tr>
</table>

Annexe: 4 Mearg Hospital Referral feedback form

			Tel No	Fax No			
from (name)				Date			
To referring person							
Address of health facility							
Patent's Name							
Identity No	Address	Age		Sex	M	F	
This patent was seen by							
Patents History ---------- ---------- ----------							
Physical Findings ---------- ---------- ----------							
Investigations ---------- ----------							
Diagnosis							
Treatment/Operation							
Medicines prescribed							
Please continue with (meds, Rx, F/u, care): Refer back to:							
Recommendation : ---------- ----------							
Name of doctor, signature							