Assessment of Quality Care in Obstetrics and Gynecology in S.S. Hospital, Petlad

By

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MBA Hospital and Health Management

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TO WHOMSOEVER MAY CONCERN

This is to certify that **Virat Neogi** student of MBA Hospital and Health Management from The IIHMR University, Jaipur has undergone dissertation training at **National Health Mission, Gujarat Govt.** from February 1st, 2016 to April 30th, 2016.

The Candidate has successfully carried out the study designated to him during dissertation training and his approach to the study has been sincere, scientific and analytical. This training is in fulfillment of the course requirements.

I wish him all success in all future endeavors.

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TO WHOMSOEVER IT MAY CONCERN

This to certify that **Mr.VIRAT NEOGI,** Student of Institute of Health Management Research, Jaipur has completed his Internship/dissertation from 1st febuary-2016 to 30 April 2016 at **S.S..Hospital, Petlad Dist-Anand.**

Mr.VIRAT NEOGI has done his internship/ dissertation on **Assessment in Quality Care in Obstetrics and Gynecology** and also taken keen interest in all administrative activities.

In period of his association with us, he has demonstrated sound knowledge of putting theory into practice and expertise in areas of work pertaining to **Quality Care in Obstetrics and Gynecology**.

He has been found honest, diligent and sincere during period of association.

We wish him success in his future endeavors,

Resident Medical Officer
S. S. Hospital
Petlad-388 450.

Resident Medical Officer
S.S.Hospital, Petlad,
Dist.Anand.

THE IIHMR UNIVERSITY, JAIPUR

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled **'Assessment of Quality care in Obstetrics and Gynecology Department in S.S. Hospital Petlad"** and submitted by Virat Neogi under the supervision of Dr. Sandesh Sharma for award of MBA in Hospital and Health Management of the University carried out during the period from 1st February 2016 to 30th April 2016 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

ACKNOWLEDGEMENT

Completion of any project is like a feather in the cap of an individual. For this consistent hard work, desire to succeed and last but not the least blessings of Lord Almighty are essential ingredients.

It gives me immense pleasure to complete my entire project in the area of Assessment of Quality Care in Obstetrics and Gynecology department for 3 months (i.e. from 1st Feb-30th April 2016) in S.S.HOSPITAL, Petlad, Dist-Anand.

For the successful accomplishment of this task I am really grateful to my mentor Dr. Sandesh Kr. Sharma for his valuable suggestion given to me to complete my dissertation.

I would also like to pay my heartiest thanks to the Residential Medical Officer (RMO) Dr. Amar Pandya of S.S.Hospital Petlad for his kind support, cooperation and guidance given to me for the successful completion of my project.

Last but not the least I thank the entire staff of S.S.HOSPITAL including Consultants, Nurses, P.P.Unit staff, Labour room staff, for cooperating in my study and making my study a memorable experience for lifetime.

With regards
Virat Neogi.

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ACRONYMS/ ABBREVIATIONS

S.No.	ACRONYMS	FULL FORM
1.	I.C.T.C	Integrated Counseling and Testing Centre
2.	NCD	Non-Communicable Diseases
3.	ARVT	Anti Retro Viral Therapy
4.	STI	Sexually Transmitted Infections
5.	NABH	National Accreditation Board For Hospitals and Healthcare Providers.
6.	ANM	Auxiliary Nurse Midwife
7.	CDMO	Chief Deputy Medical Officer
8.	MO	Medical Officer
9.	Ch. Pharmacist	Chief Pharmacist
10.	Sr. Pharmacist	Senior Pharmacist
11.	Jr. Pharmacist	Junior Pharmacist
12.	O.S	Office Superintendent
13.	AHA	Assistant Hospital Administrator
14.	S.I	Sanitary Inspector
15.	H.C	Head Clerk
16.	Sr. C	Senior Clerk
17.	Jr. C	Junior Clerk
18.	PHC	Primary Health Centre
19.	CHC	Community Health Centre
20.	SC	Sub Centre

PART – 1 INTERNSHIP REPORT

Introduction Of The Internship:-

During my internship I worked on various problem areas of the hospital on daily basis along with the dissertation project.

In the first week of my internship, I met Chief District Medical Officer (CDMO) Sir Dr. Nimitt. S. Kubavat and explained him the purpose of my internship. After which I was given an introduction to the hospital, it's various departments and functioning.

From the second week onwards I was given responsibilities like supervision of all paramedical staff, housekeeping staff, conducting trainings, organizing meetings and giving notices/circulars and instructions to staff and assisting Chief District Medical Officer.

Apart from the above responsibilities given to me I even took daily rounds of the hospital, handling employee grievances and solving problems.

1.1 OBJECTIVES OF THE INTERNSHIP:-

The main objective of the internship is to understand the work culture of the organization, their process of work and to assist the Chief District Medical Officer in day to day operations.

During this period, I worked on the project "Assessment of quality care in Obstetrics and Gynecology department in the hospital."

Method Of Data Collection:-

1. Random survey and vigilant observation in the respective department.
   Primary data was collected in the form of checklist, face to face interaction, questionnaires and observation.
2. Secondary data was available from various sources within the hospital premises.

1.2 HOSPITAL PROFILE

S.S.HOSPITAL, PETLAD is a district civil hospital. It was started in the year August 27 , 19 41

District Health System of Petlad is the fundamental basis for implementing various health policies and delivery of health care, management of health services for defined geographic area of Petlad district.

S.S.Hospital is an essential component of the district health system and functions as a secondary level of healthcare which provides curative, preventive and promotive healthcare services to the people in the district.

MISSION :- To enhance the patient quality life through providing specialized medical treatment at free/affordable rates to the poor and the needy and to provide preventive healthcare.

VISION:- To be the part of network to be the finest public health care institutions in the state of Gujarat, providing quality medical services with the state of art technology with easy accessibility, affordability and equity to the people of Gujarat and beyond.

LOCATION:- Near Petlad Bus Stand and Petlad Railway Station, Petlad.

Dist- Anand.

1.2 BRIEF HISITORY OF DEPT:-

It provides OPD services to patients from 1 CHC & 1 PHC.

OPD services include:

- Medicine
- Surgery
- Orthopedics
- Obstetrics & Gynecology
- Pediatrics
- Dermatology
- Ophthalmology
- Dental
- Psychiatric

1.3 SOME **OTHER OPD SERVICES:-**

- Counseling BPL and illiterate patients/pregnant women regarding Family Planning, miscarriages, counseling on healthy habits, counseling on hand washing, etc.
- Counseling patients regarding STD Clinics (Sexually Transmitted Diseases).

In Patient Department:

Separate Male, Female, Maternity, Pediatrics and Eye ward is available.

Emergency Department:

Emergency department has emergency medical officers room. Being a District Hospital, all the emergency facilities are not available so the patients are stabilized and then referred to other referral hospitals with higher linkages.

Operation Theatre:

There are 3 OT's with 5 OT tables. Out of these, 2 are Gynecology OT for doing C-section, 1 in General Surgery and 2 in Eye surgeries

All the OT rooms are air conditioned but zoning of air needs to be done.

Laboratory:-

Laboratory has been provided with semiautomatic analyser and range of tests to be conducted has increased according to norms for the facility. Microbiology services are available in the laboratory.

Radiology:-

X ray department has 2 rooms:- processing room and dark room.

CT Scan, MRI, USG facility is not available in the hospital

OTHER SERVICES/FACILITIES AVAILABLE

NURSING SCHOOL	NCD CENTRE	ICTC CENTRE
ISOLOLATION WARD	POST PARTUM UNIT	LABOUR ROOM
AUDITORIUM/ TRAINING CENTER	District Disability REHABILITATION CENTER	PHARMACY
ARVT CENTRE	NRC	SWINE FLU WARD

Managerial Task Performed

Task that are performed are as follows:-

1) Reviewed monthly HMIS report according to the IPHS format.

Some of the important findings are as follows:-

No. of Outpatients during the period 01/02/2016-29/02/2016

S.No.	Department	Male	Female	Eunuch	Male Child	Female Child	Eunuch Child	Total
1	Others	2	9	0	1	1	0	13
2	Audiology Department	13	4	0	10	4	0	31
3	Clinical Psychologist	12	7	0	14	11	0	44
4	Dental OPD	16	25	0	2	4	0	47
5	ENT OPD	31	32	0	24	10	0	97
6	General OPD	1,546	1,560	0	448	392	0	3,946
7	Ophthalmo-logy OPD	642	685	0	59	57	0	1,443
8	Orthopedic OPD	30	52	0	3	4	0	89
9	Orthopedic OPD 2	52	27	0	11	6	0	96
10	Pathology/ Lab	3	8	0	0	1	0	12
11	Pediatric OPD	0	0	0	417	410	0	827
12	Physician-Medical OPD	99	79	0	2	3	0	183
13	Psychiatric OPD	37	36	0	26	12	0	111
14	Retina OPD	1	0	0	0	0	0	1
15	Dermatology OPD	120	153	0	46	64	0	383
16	Surgeon OPD (Female Surgical/ Gyne OPD	1	464	0	0	11	0	476
17	Surgery	0	0	0	0	1	0	1
	Total	2,605	3,141	0	1,063	991	0	7,800

Table 1 No. of Outpatients during the period 01/02/2016-29/02/2016

No. of Outpatients during the period 01/03/2016-31/03/2016

S.No.	Department	Male	Female	Eunuch	Male Child	Female Child	Eunuch Child	Total
1	Others	3	4	0	1	0	0	8
2	Audiology Department	10	5	0	5	1	0	21
3	Clinical Psychologist	2	4	0	12	7	0	25
4	Dental OPD	27	16	0	5	2	0	50
5	ENT OPD	31	38	0	19	18	0	106
6	General OPD	1,603	1,442	0	207	186	0	3,483
7	Ophthalmo-logy OPD	527	714	0	55	85	0	1,381
8	Orthopedic OPD	35	54	0	4	2	0	95
9	Orthopedic OPD 2	94	52	0	10	13	0	169
10	Pathology/Lab	15	26	0	0	0	0	41
11	Pediatric OPD	0	0	0	537	495	0	1,032
12	Physician-Medical OPD	147	138	0	3	5	0	293
13	Psychiatric OPD	33	45	0	23	13	0	114
14	Retina OPD	2	0	0	0	0	0	2
15	Dermatology OPD	38	192	0	52	59	0	441
16	Surgeon OPD (Female Surgical/ Gynec OPD)	0	469	0	2	15	0	486
	Total	2,667	3,199	0	935	901	0	7,702

Table 2 No. of Outpatients during the period 01/03/2016-31/03/2016

No. of Outpatients during the period 01/04/2016-30/04/2016

S.No.	Department	Male	Female	Eunuch	Male Child	Female Child	Eunuch Child	Total
1	Others	0	1	0	1	2	0	4
2	Audiology Department	3	1	0	0	0	0	4
3	Clinical Psychologist	0	0	0	3	5	0	8
4	Dental OPD	11	13	0	2	2	0	28
5	ENT OPD	10	8	0	2	6	0	26
6	General OPD	718	733	0	24	127	0	1702
7	Ophthalmo-logy OPD	200	262	0	26	13	0	501
8	OrthopedicOPD	17	26	0	0	1	0	44
9	Orthopedic OPD 2	98	48	0	12	11	0	19
10	Pathology/Lab	22	33	0	1	1	0	57
11	Pediatric OPD	0	0	0	201	175	0	376
12	Physician-Medical OPD	33	32	0	2	1	0	68
13	Psychiatric OPD	17	24	0	8	7	0	56
14	Dermatology OPD	72	109	0	28	42	0	251
15	Surgeon OPD (Female Surgical/ Gynec OPD)	0	265	0	0	18	0	283

Table 3 No. of Outpatients during the period 01/04/2016-30/04/2016

Operation Theatre

S.No.	Title	Feb	Mar	Apr	Avg.
1	No. of minor surgeries done	10	16	08	11.33
2	No. of major surgeries	12	10	16	12.66

Table 4 Operation Theatre

Maternal and Child Health

S.No.	Title	Feb	Mar	Apr	Avg.
1	No. of normal deliveries in the hospital	93	72	79	81.33
2	No. of normal deliveries(BPL Category)	0	0	0	0
3	No. of C-section deliveries	11	10	15	12
4	No. of C-section deliveries(BPL category)	0	0	0	0
5	No. of maternal deaths	0	0	0	0
6	No. of neo natal deaths	0	0	0	0
7	No. of still births	0	0	0	0

Table 5 Maternal and Child Health

Laboratory Services

S.No.	Title	Feb	March	Apr	Avg.
1	No. of lab test done	17089	15712	15715	16172

Table 6 Laboratory Services

Radiology

S.No.	Title	Feb	March	Apr	Avg.
1	No. of X – Ray taken	211	254	225	230

Table 7 Radiology

Pharmacy

SL.No.	Title	Feb	March	Apr	Avg.
1	No. of drugs expired during the month	0	0	0	-

Table 8 Pharmacy

BLOOD BANK

SL.NO.	Title	Feb	March	April	Avg.
1	No. of blood units issued	7	3	-	3.33

Table 9 BLOOD BANK

CHALLENGES FACED

The main challenge that was faced during the study was the language barrier. As the study was conducted in S.S.Hospital Petlad where people are more comfortable with Gujarati language or local language. So, it was tough to interact and communicate with local people initially.

The second challenge was to manage the house keeping staff, handling their day to day grievances.

The third challenge was lack of motivation among staffs and resistant to accept changes (new technology) made the situation much more difficult to handle.

PROPOSAL/SOLUTION

In order to cater to the problem of housekeeping, departmental heads were given checklists regarding the day to day work of housekeeping staff which they need to monitor, check and then put their signature on daily basis.

At, the same time in order to motivate staffs to work and implement new concepts, first of all training was imparted; they were taken to other hospital to make them understand the working process of other hospital and were asked to implement the good practices in their department.

After few days of monitoring those staffs that performed well and implemented things were given some incentives as a token of recognition and thus they were motivated to work and it even inspired others to follow their footsteps.

PART-2 DISSERTATION

2.1 INTRODUCTION TO OBSTERICS AND GYNECOLOGY:-

The department of Obstetrics and Gynecology takes care after the female patients.Obstetrics deals with pregnancy and child birth. An obstetrician gives pre pregnancy counseling, looks after the woman and her baby during pregnancy, helps with child birth and looks after the woman for six weeks after delivery.

A Gynecologist consults women with diseases of the reproductive system. These include period problems, infections, benign tumors like fibroids and ovarian cysts and cancers.

Women wanting to conceive are taken care by the Reproductive Medicine unit which will look after the Gynecological problems of these patients also.

Obstetrical Specialties:-

- High Risk Obstetric Care
- Prenatal testing
- Fetal Assessment
- Birthing Centre
- Reproductive Endocrinology

Gynecological Specialties:-

- Cervical Dysplasia
- Endometriosis
- Fibroids
- Gynecological cancer
- HIV Women's Health
- Infertility
- Menopause
- Menstrual Disorders
- Ovarian cysts
- Pelvic Floor Disorders
- Urinary Incontinence
- Diagnosis and treatment

2.2 BACKGROUND OF STUDY:-

Hospital is an institution that provides medical or surgical care and treatment for the injured. Obstetrics and Gynecology services are considered as one of the essential services in a district hospital.

Obstetrics and Gynecology is one of the most important department as far as a District Hospital is concerned because of the BPL category of patients. While dealing with such patients, words like abortion and miscarriage have to be kept in mind and dealt carefully, while counseling them.

Obstetrics and Gynecology services are considered as one of the essential services in a district hospital. Present study for the Assessment of Quality Care in Obstetrics & Gynecology Department was conducted according to Indian Public Health Standards (IPHS) Guidelines at General Hospital (Inputs), Study the Service Delivery Framework i.e. Antenatal care, Intra natal care, Post natal care services (Process), Analysis of the outcome, and Identification of problems and bottlenecks thus suggesting recommendations for improvement.

BPL patients also need severe counseling regarding STI, pre and post pregnancy, nutritional advice, antenatal care, post natal care, etc.

ANTENATAL CARE:-

Antenatal care is the care which a woman receives from healthcare professionals during their pregnancy. They are offered a series of appoints with a midwife or sometimes with an obstetrician who specializes in pregnancy and birth. They will check that the woman and her baby are well and doing fine and will give useful information to help the woman give a healthy pregnancy including healthy eating and exercise advice and answer any doubts/questions that the pregnant woman may have.

POST NATAL/POST PARTAM CARE:-

As the word itself suggests, care of the woman (after birth) healthcare for expectant mothers. Prenatal care helps decreases risks during pregnancy and increases the chance of a safe and healthy delivery

Bio Medical Waste Management is also kept in mind at the same time so that HAI (Hospital Acquired Infection) or cross infection does not take place at any cost which is are vital for pregnant woman.

2.3 LITERATURE REVIEW

The World Health Organization (WHO) estimates that, of 536,000 maternal deaths occurring globally each year, 136,000 take place in India. Estimates of the global burden of disease for 1990 also showed that India contributed 25% to disability-adjusted life-years lost due to maternal conditions alone.(1).

According to the IPHS Guidelines, services that a district hospital is expected to provide can be grouped as Essential services (Minimum Assured Services) and Desirable services (which we aspire to achieve).(2) Obstetrics and Gynecology services are the Essential Services whereas Post Partum Unit is a desirable service in a district hospital.(3)

Delivery Suite Unit:-

The Delivery Suite Unit should be located on the ground floor, near the Operation Theatre (OT) . The Delivery Suite should include the various facilities of accommodation as given below:-

- Reception and Admission
- Examination and preparation room
- Labor Room (Clean and Septic Room)
- Delivery Room
- Neo-Natal Room
- Sterilizing Room
- Sterile Store Room
- Scrubbing Room
- Dirty Utility Area
- Clean Utility Area
- Doctors Duty Room
- Nursing Station
- Nurses Changing Room
- Group C & D Room

Post-Partum Unit:-

It is desirable that every district hospital should have a post-partum unit with following services in an integrated manner:-

- ✓ Post natal services
- ✓ All family planning services
- ✓ Safe abortion services
- ✓ Immunization in an integrated manner

ANTENATAL CARE:-

Antenatal Care (also known as prenatal care) refers to the regular medical and nursing care recommended for women during pregnancy. (4)Prenatal care is a type of preventative care with the goal of providing regular check-ups that allow doctors or midwives to treat and prevent potential health problems throughout the course of pregnancy while promoting healthy lifestyles that benefit both mother and child.(5)

During check-ups, women will receive medical information over maternal physiological changes in pregnancy, biological changes, and prenatal nutrition including prenatal vitamins.(6) Recommendations on management and healthy lifestyle changes are also made during regular check-ups.

Prenatal care has played a part in reducing maternal death rates and miscarriages as well as birth defects, low birth weight, and other preventable health problems.(7)

Prenatal care generally consists of:-

- Monthly visits during the first two trimesters (from week 1-28)
- Fortnightly from 28 to week 36 of pregnancy
- Weekly after week 36 (delivery at week 38-40)
- Assessment of parental needs and family dynamic.

INTRANATAL CARE:-

Intranasal care is of extreme importance for every pregnancy. Such level of care strongly emphasizes on great deal of safe procedures on the following:-

- ➢ Clean surrounding of the labor room and other rooms connected to it.
- ➢ Clean hands and hygienic practices.
- ➢ Following safe and hygienic delivery practices.
- ➢ Maintaining highest standards of sterility of tools and instruments

Purpose of Intranatal Care:-

- ✓ Clean and hygienic delivery conditions.
- ✓ Safe Delivery with minimum injury to the infant and mother.
- ✓ Preparedness to deal with complications such as prolonged labor, ante partum hemorrhage, convulsions, etc.
- ✓ Care of the baby.

POST NATAL CARE:-

Postnatal care refers to the care of the mother and the new born child after delivery. It is also called post partial care.

Objectives of Post Natal Care:-

- ❖ To prevent complications of post partial period
- ❖ To provide care for the rapid restoration of the mother to optimum health

❖ To check adequacy of breast feeding

❖ To provide family planning services

❖ To provide basic health education to mother and family

Essential Physical Care for Mother:-

The following vitals are supposed to be kept under observation:-

- Body temperature
- Pulse and respiration
- Breasts
- Urine and Bowel checks
- Involution of uterus
- Keeping check for any sort of infection
- Anemia
- Nutrition

Frequency of Post Natal Check-ups:-

✓ Three times a day for three days after delivery

✓ Once or twice a week for first few weeks

✓ Once a month for first 6 months

✓ Once in 2-3 months for end of one year

OBJECTIVES:-

➢ **Objective 1** -To check the standards related to the service delivery framework (Antenatal care, Intranasal care and Post Natal Care) in a hospital (process)

➢ **Objective 2** -To find out the number of Normal Deliveries, Mortality, Complications and Referrals due to lacking services (outcome)

➢ **Objective 3**-To pinpoint the problems and bottlenecks

➢ **Objective 4** -To suggest recommendations

2.4 PROBLEM STATEMENT

To assess the existing service delivery system of the hospital and identify the areas and fulfilling the gaps and make improvement to enhance the compliance of standards for quality care in Obstetrics and Gynecology in the hospital.

2.5 METHODS OF DATA COLLECTION

Study Method - The study will be both qualitative as well as quantitative in nature. Qualitative method will be used to get in depth understanding and also to acquire subjective and behavioral insight into topic. To measure level of action and trends for definite and objective behavior, quantitative method will be used as per the need of the study.

Study Design - Descriptive study

Study Area - Female Genral Ward, Post Partum Unit in District Hospital, Petlad.

Sample Size - 6 Doctors and 6 Nurses

Sampling Approach - Convenient sampling.

Data Collection Tools – Secondary data collection includes hospital records, IPHS guidelines, articles, internet.

Primary data will be collected by direct observation, Formal interview and departmental visits.

2.6 GAP ANALYSIS

Did a gap analysis on biomedical waste management using checklist in the departments of Labor Room, Wards, OT & OPD.

CHECKLIST FOR BIOMEDICAL WASTE MANAGEMENT

S.No.	Give your answers in Yes/No	Labor Room (Yes/No)	Wards (Yes/No)	OT (Yes/No)	OPD (Yes/No)
1	Adequate no. of BMW bins as per BMW Guide line. (Red,Yellow, Blue and Black) and Green bins for General Waste.	**Yes**	**Yes**	**Yes**	**Yes**
2	Adequate no. of BMW bags as per BMW Guide line. (Red,Yellow, Blue and Black) and Green bags for General Waste.	**Yes**	**Yes**	**Yes**	**Yes**
3	Punture proof containers for sharps (Blue Bags)	**Yes**	**Yes**	**Yes**	**Yes**
4	Mutilators (Needle/ syringe cutters)	**Yes**	**Yes**	**Yes**	**Yes**
5	Calibrated weighing machine for BMW	**Yes**	**Yes**	**Yes**	**Yes**
6	Personal protected equipments like gloves, caps, masks, aprons, & gum boots etc. used as per BMW Guide line.	**Yes**	**Yes**	**Yes**	**Yes**
7	1% fresh Sodium Chlorite or Bleaching Powder Solution as per BMW Guide line.	**Yes**	**Yes**	**Yes**	**Yes**
8	BMW Record Register	**Yes**	**Yes**	**Yes**	**Yes**
9	Mercury Spill Management Kit	**Yes**	**Yes**	**Yes**	**Yes**
10	Blood Spill Management Kit	**Yes**	**Yes**	**Yes**	**Yes**
11	Post Exposure Prophylaxis kit	**Yes**	**Yes**	**Yes**	**Yes**

12	BMW storage Rooms with lock and key	**Yes**	**Yes**	**Yes**	**Yes**
13	BMW Licenses under GPCB (Gujarat Pollution Control Board)	**Yes**	**Yes**	**Yes**	**Yes**
14	Different forms and formats (Needle stick injury and annual report, etc.)	**Yes**	**Yes**	**Yes**	**Yes**

Man Power for BMW

1	Availability of trained & dedicated person for BMW Management	**Yes**	**Yes**	**Yes**	**Yes**
2	Trained and skilled BMW person for BMW collection & Transportation.	**Yes**	**Yes**	**Yes**	**Yes**
3	Dedicated & Trained Infection Control Nurse.	**Yes**	**Yes**	**Yes**	**Yes**

Training For BMW

1	Training for BMW Handlers	**Yes**	**Yes**	**Yes**	**Yes**

	Give your answers in Yes/No	**Labor Room (Yes/No)**	**Wards (Yes/No)**	**OT (Yes/ No)**	**OPD (Yes/ No)**
1	Is the waste segregated at the site of generation	**Yes**	**Yes**	**Yes**	**Yes**
2	Is the sharp infections waste (needle, blades, broken glass etc) to be disposed in white/ blue puncture proof containers?	**Yes**	**Yes**	**Yes**	**Yes**
3	Is the non sharp infectious material (infected plastic, syringe, dressing gloves, masks, blood bags and urine bags) to be disposed in red plastic bins/bags	**Yes**	**Yes**	**Yes**	**Yes**

Generation & Segregation

From Blood Bank/Labor Room/Wards/OT/OPD

4	Is Anatomical infectious waste (Placenta, body parts) to be disposed in yellow plastic bins or bags	**Yes**	**Yes**	**Yes**	**Yes**
5	Is non infectious (General) waste e.g. packing materials, cartons, fruit and vegetable pills , syringe and needle wrapper, medicine covers to be disposed in Green/Black plastic bins or bags.	**Black Bags In All Departments** **Yes**	**Black Bags In All Departments** **Yes**	**Black Bags In all Departments** **Yes**	**Black Bags In All Departments** **Yes**
6	Is the infectious waste and non infectious waste mixed at the source of generation?	**No**	**No**	**No**	**No**

- Conducted the process for the implementation of 5s (Sort, Set in Order, Shine, Standardize, Sustain) all over the hospital. Under this process, various departments were visited in the hospital.

  The members participated in the visit were as follows:-

  - Chief District Medical Officer
  - Residential Medical Officer
  - Medical Officer
  - Pathologist
  - Administrative Officer
  - Senior Pharmacist
  - Matron
  - Head Clerk
  - Head Nurse of all wards
  - Assistant Hospital Administrator

Identified the areas where there was lack of “5 s” implementation

- ✓ Instructed all to arrange things according to 5s procedure
- ✓ Proper labeling of items was done in various departments
- ✓ Implemented the red tag system for all condemn items, extra items; need to be repaired items for its easy identification.

3. Supervision of all paramedical staff, housekeeping and security staff
4. Giving notices and instructions
5. Arranged and coordinated meetings on timely basis
6. Organized training on fire safety, hospital infection control, etc.

2.7 RESULTS AND FINDINGS OF THE STUDY

OBJECTIVE 1 (INPUTS) – Assessment of the infrastructure, manpower, equipments and drugs present in the hospital as per the IPHS guidelines.

PROFOMA FOR IPHS FACILITY SURVEY OF CATEGORY 1 (101-200) DISTRICT HOSPITALS.

Name of the state - Gujarat
District - Anand
Name of the hospital - S.S.Hospital
Period of data collection - 1st Febuaury 2016 – 30th April 2016
Name of person collecting data - Virat Neogi

SERVICES

S.No.		
1.1	Population covered in numbers	55,330
1.2	**Specialist Services**	**Available(Yes/No)**
A	General Medicine	Yes
B	General Surgery	Yes
C	Obstetrics and Gynecology	Yes
D	Pediatrics including Neonatology	Yes
E	Emergency(Accident and other emergency) (Casualty)	Yes
F	Critical Care(ICU)	No
G	Anaesthesia	Yes
H	Ophthalmology	Yes
I	ENT	Yes
J	Dermatology and Venerology (sin and VD) RTI/STI	Yes
K	Orthopedics	Yes
L	Radiology	Yes
M	Dental Care	Yes

1.3	Para Clinical Services	Available (Yes/No)
A	Laboratory	Yes
B	X-Ray	Yes
C	Ultrasound	No
D	ECG	Yes
E	Blood Transfusion and Storage	Yes
F	Physiotherapy	No
G	Dental Technology (Dental Hygiene)	Yes
H	Drugs and Pharmacy	Yes

1.4	Support Services	Available (Yes/No)
A	Medico-Legal Cases/ Postmortem	Yes
B	Ambulance Services	Yes
C	Dietary Services	No
D	Laundry Services	Yes
E	Security Services	Yes
F	Counseling Services for domestic violence, gender violence, adolescents, etc. Gender and socially sensitive service delivery be assured.	Yes
G	Waste management	Yes
H	Ware Hosing/ Central Store	Yes
I	Maintenance and repair	Yes
J	Electric supply (power generation and stabilization)	Yes
K	Water Supply (plumbing)	Yes
L	Transport	Yes
M	Communication	Yes
N	Medical Social Work	Yes
O	Nursing and midwife	Yes

	Services	
P	Sterilization and disinfection	Yes
Q	Lift and vertical transport	No

1.5	**Administrative Services**	**Available (Yes/No)**
A	Finance(Financial Accounting and auditing; timely submission of SOEs /UCs)	Yes
B	MedicalRecords (Provision should be made for computerized medical records with anti- virus facilities whereas alternate records should also be maintained)	Yes
C	Procurement	Yes
D	Housekeeping and sanitation	Yes
E	Education and Training	Yes
F	Inventory Management	Yes

According to IPHS guidelines, Obstetrics and Gynecology Specialist Services are as follows:-

1.6	Obstetrics and Gynecology Specialist Services	Available (Yes/No)
1	Forceps Delivery	Yes
2	Craniotomy- dead fetus/ Hydrocephalus	No
3	Caesarean Section	Yes
4	Female Sterilization(mini laparotomy and laparoscopic)	No
5	D & C	Yes
6	MTP (Medical Methods and Surgical Methods	Yes
7	IUCD services (Insertion and Removal) Contraceptives including emergency	Yes

	contraceptives	
8	Bartholin Cyst Excision	No
9	Suturing Perinea Tears	Yes
10	Ovarian Cystectomy/ Oophrectomy	No
11	Vaginal Hysterectomy	Yes
12	Haematocolps Drainage Colostomy	No
13	Caesarian Hysterectomy	Yes
14	Assisted Breech Delivery	Yes
15	Cervical Biopsy	No
16	Cervical Cautery (Electro/ Cryocautery)	No
17	Normal Delivery	Yes
18	PPTCT	Yes
19	Midtrimestor Abortion	Yes
20	Ectopic Pregnancy Ruptured & Enraptured	No
21	Retain Placenta	Yes
22	Suturing Cervical Tear	Yes
23	Assisted Twin Delivery	Yes
24	Colposcopy	No
25	Hysteroscopy	No
26	Laparoscopy Diagnostic / Operative	No
27	Vacuum Delivery	Yes
28	Endometrial Biopsy	No
29	ECC	No
30	Cervical Biopsy	No
31	Endometrial Aspiration	No
32	Hysterectomy	Yes
33	Sling Operation	No
34	Tuboplasty	No
35	Emergency and Explanatory Laparotomy (Uterine Perforation, Septic abortion, Twisted Ovarian, Pelvic Abscess, Ectopic Pregnancy)	No
36	FNAC	No
37	Management of severe anemia.	Yes

MANPOWER REQUIREMENTS

Following is the minimum essential manpower required for a functional district hospital.

District Hospital Man Power – Medical

S.No.	Specialty	100 Beds	Available(Yes /No)	Current Availability in hospital(in numbers)
1	Medicine	2	Yes	1
2	Surgery	2	Yes	1
3	Obstetrics & Gynecology	2	Yes	1
4	Pediatrics	2	Yes	1
5	Anesthesia	2	Yes	1
6	Ophthalmology	1	Yes	1
7	Orthopedics	1	Yes	1
8	Radiology	1	Yes	1
9	Pathology	1	Yes	1
10	ENT	1	Yes	1
11	Dental	1	Yes	1
12	MO	11	Yes	2
13	Dermatology	1	Yes	1
14	Psychiatry	1	Yes	1
15	Microbiology	1	Yes	1
16	Forensic Specialist	1	No	-
17	AYUSH Doctors	1	No	-
	TOTAL	32		16

Table 10District Hospital Man Power – Medical

District Hospital Man power – Nurses and Para-Medical

S.No.	Cadre	100 Beds	Available(Yes/No)	Current Availability in hospital (in numbers)
1	Staff Nurse	45	Yes	23
2	Lab Tech	6	Yes	5
3	Pharmacist	5	Yes	5
4	Storekeeper	1	Yes	1
5	Radiographer	2	No	-
6	ECG Tech/Eco	1	Yes	1
7	Audiometric an	1	Yes	1
8	Ophthalmology Assistant	1	Yes	1
9	EEG Tech	-	-	-
10	Dietician	1	No	-
11	Physiotherapist	1	No	-
12	O.T. Tech	4	No	-
13	CSSD Asstt.	1	No	-
14	Social Worker	2	Yes	2
15	Counselor	1	Yes	1
16	Dermatology Tech	-	No	-
17	PFT Tech	-	No	-
18	Dental Tech	1	No	-
19	Darkroom Asstt.	2	Yes	1
20	Rehabilitation Therapist	1	No	-
21	Biomedical Engineer	1	No	-
	TOTAL	76		41

Table 11District Hospital Man power – Nurses and Para-Medical

Total Medical and Paramedical Manpower

S.No.	Cadre	100 Beds	Available (Yes/ No)	Current Availability in hospital (in numbers)
1	Doctors	29		15
2	Staff Nurse	45		23
3	Paramedical	31		
	Total	105		

Table 12Total Medical and Paramedical Manpower

District Hospital Manpower - Administration

S.No.	Cadre	100 Beds	Available (Yes/No)	Current Availability in hospital (in numbers)
1	Hospital Administrator	1	**Yes**	1
2	Asst. Hospital Administrator	1	**Yes**	1
3	Medical Records Officer	1	**Yes**	1
4	Asst. Medical Records	1	**No**	-
5	House Keeping Manager	2	**No**	-
6	Accounts/Finance	1	**Yes**	1
7	Admin. Officer	1	**Yes**	1
8	Office Asst. Gr.1	1	**No**	-
9	Office Asst. Gr.2	1	**No**	-
10	Ambulance Services (2 Driver + 2 Tech.)	2+2	**Yes**	2 Drivers
	Total	14		7

Table 13 District Hospital Manpower - Administration

Equipment Requirements

Labor Room, Neon Natal and Special Newborn Care Unit (SNCU) Equipments:-

S.No.	Name of Equipment	101-200 Beds	Availability (Yes/No)	Current Availability in hospital (in numbers)
1	Baby Incubators	1	No	-
2	Physiotherapy unit	2	Yes	2
3	Emergency Resuscitation Kit Baby	2	Yes	2
4	Standard Weighing Scale	1 set each for the labor room & OT	Yes	1
5	Newborn Care Equipment	1 set each for the labor room & OT	Yes	1
6	Double-outlet Oxygen Concentrator	1 set each for the labor room & OT	Yes	1
7	Radiant Warmer	2	Yes	6
8	Room warmer	2	No	-
9	Fetal Doppler	2	No	-
10	Cardio Taco Graphy Monitor	2	No	4
11	Delivery Kit	10	Yes	2
12	Episiotomy Kit	2	Yes	1

13	Forceps	2	Yes	-
14	Craniotomy	1	No	1
15	Vacuum extractor metal	2	Yes	-
16	Silastic vacuum extractor	2	No	1
17	Pulse Oxymeter baby & adult	1 set each for LR & OT	Yes	1
18	Cardiac Monitor baby & adult	1	Yes	1
19	Nebulizer baby	2	Yes	1
20	Weighing machine adult	3	Yes	1
21	Weighing machine infant	3	Yes	1
22	CPAP Machine	-	No	-
23	Head box for oxygen	4	Yes	1
24	Haemoglobinometer	1	No	-
25	Glucometer	1	No	-
26	Public Address System	1	No	-
27	Wall Clock	1	Yes	1
28	BP Apparatus & Stethoscope	2+2	No	-

Table 14 Labor Room, Neon Natal and Special Newborn Care Unit (SNCU) Equipments:-

Equipment List for Special Newborn Care Unit (SNCU)

A. General Equipment for SNCU

S.No.	Name of the Equipment	Requirement for the unit	Available (Yes /No)	Current Availability in hospital (in numbers)
1	Electronic weighing scale	5 (essential)	Yes	1
2	Emergency drugs trolley	5 (essential)	Yes	1
3	Procedure trolley	5 (essential)	Yes	1
4	Wall clock with seconds hand	1 for each room	No	-
5	Refrigerator	1 for the unit	No	-
6	Spot lamp	5 (essemtial)	Yes	1
7	Basic Surgical instruments e.g. fine scissors, scalpel with blades, fine artery forceps, suture material & needles, towel, clips, etc	1 set per bed (essential)	Yes	3 sets
8	Nebulizer	1 for the unit	Yes	1 set
9	Multi channel monitor with non-invasive BP monitor (3 size: 0,1,2 – disposable in plenty reusable neonatal probe, at atleast 4)	4 (desirable)	No	-
10	Room Thermometer	4 (essential)	Yes	-

Table 15A. General Equipment for SNCU

B. Equipment for disinfection of Special Newborn Care Unit

S.No.	Name of the Equipment	Requirement for the unit	Available (Yes /No)	Current Availability in hospital (in numbers)
1	Electric Heater /Boiler	2 (essential)	Yes	1
2	Washing machine with dryer (separate)	1 (essential)	No	-
3	Electronic fumigator	2 (essential)	Yes	-
4	Vacuum Cleaner	1 (essential)	No	-
5	Gowns for doctors, nurses, neonatal aids, Group D staff & mothers	Adequate number of each size (essential)	Yes	9 (2 plastic gowns, 7 green gowns)
6	Washable slippers	Adequate number of each size (essential)	No	2 pairs
7	Vertical Autoclave	1 (essential)	Yes	-
8	Autoclave drums (large, medium & small size)	At least 6 of each size (essential)	Yes	1
9	Disinfectant Sprayer	1 (essential)	No	-
10	Container for liquid disinfectant	2 (essential)	Yes	1
11	Formalin Vaporizor	1 (essential)	No	-

12	Hot Air Oven	1 (desirable)	No	-
13	Ethylene Oxide Sterilizer (ETO)	1 (desirable)	No	-

Table 16B. Equipment for disinfection of Special Newborn Care Unit

C. Equipments for individual patient care in the Special Newborn Care Unit

S.No.	Name of the Equipment	Requirement for the unit	Available (Yes /No)	Current Availability in hospital (in numbers)
1	Servo-Controlled Radiant Warmer	1 for each bed (essential) +2	Yes	4
2	Low-Reading Digital Thermometer (centigrade scale)	1 for each bed (essential)	Yes	1
3	Neonatal Stethoscope	1 for each bed (essential) +2	No	-
4	Neonatal Resuscitation Kit (Larval type, Silicone, Autoclavable 240 ml, 450 ml resuscitation bag with valves-including pressure release	1 for each bed (essential) +2	Yes	2

	valve), oxygen reservoir & silicon round cushion masks size 0 & 00), Neonatal Laryngoscope with straight blade & spare bulbs			

5	Suction Machine	1 for each bed (essential) +2 (80% should be electrically operated & 20% should foot operated)	Yes	1
6	Oxygen Hood (unbreakable-neonatal/ infant size)	1 for each bed (essential) (20% extra incase of repair / disinfection)	Yes	1
7	Non stretchable measuring tape (mm scale)	1 for each bed (essential)	Yes	1
8	Infusion pump or syringe pump	1 for every 2 beds (essential)	Yes	-
9	Pulse Oxy meter	1 for every 2 beds	Yes	-

		(essential)		
10	Double Outlet Oxygen Container	1 for every 3 beds (essential)	Yes	1
11	Double Sided Blue Light Photography	1 for every 3 beds (essential)	Yes	1
12	Generator (15 KVA)	1 (Desirable)	No	-
13	Flux meter	1 (Desirable)	No	-
14	CFL Phototherapy	1 for every 3 beds (essential)	No	-
15	Horizontal Laminar Flow	I (essential)	No	-
16	Windows AC (1.5) / split AC	Laboratory, Teaching & Training Room (essential)	Yes	1

Table 17C. Equipments for individual patient care in the Special Newborn Care Unit

DRUGS USED IN OBSTETRICS AND GYNECOLOGY

S.No.	Name of the drug	Available (Yes/No)
1	Inj. Labetolol 100 ml	Yes
2	Tab. Medroxy Progestronate Acetate 10 mg	Yes
3	Tab. Ethanyl Estradiol 1 mg,2 mg	No
4	Tab. Pyrazinamide 500 mg, 750 mg	Yes
5	Tab. Ondenstron 4 mg	No
6	Tab. Mesoprostol	Yes
7	Tab. Cabergoline 0.5 mg	No
8	Tab. Trenaxamic Acid 500 mg	No
9	Tab. Ritodine 10 ml	No
10	Tab. Duvadilan	No
11	Tab. Methyl Ergometrine	Yes
12	Tab. Primolut- N	No
13	Tab. Stilboesterol	No
14	Lubic Gel	No

15	Dinoprostrone (Cervigel) Gel	No
16	Clotrimazole- Vaginal Tab. 100 mg	Yes
17	Clotrimazole+Clindamicin 100 mg + Viginal Tab. 100 mg	No
18	Betadine Vaginal Tab.	No
19	Haymycin Vaginal Tab.	No
20	Inj. Hydroxyl Progesterone 500 mg 2 ml	No
21	Inj. Methyl Ergometrine 0.2 mg/ amp	Yes
22	Inj. Ethacredin Lactate (Epidosyn)	No
23	Inj. Valethemide Bromide (Epidosyn)	No
24	Inj. Methotrexate	No
25	Inj. Trenaxamic Acid 500 mg	No
26	Inj. Ritrodine 10 ml, 50 mg	No

27	Inj. Betamethasone 8 mg	Yes
28	Inj. Magnesium Sulphate 20% , 50 %	Yes
29	Inj.Pitocin	No
30	Inj. Prostodin	No

List of Essential Drugs for preventing Maternal Deaths as recommended by the State Maternal and Infant Death Review Committee are as follows:-

- Inj. Magnesium Sulphate
- Plasma substitute (Dextran 70)
- Inj. Carboprost
- Tab/ Inj. Methylergometrine
- Tab. Misoprostol
- Tab. Oxytocin.

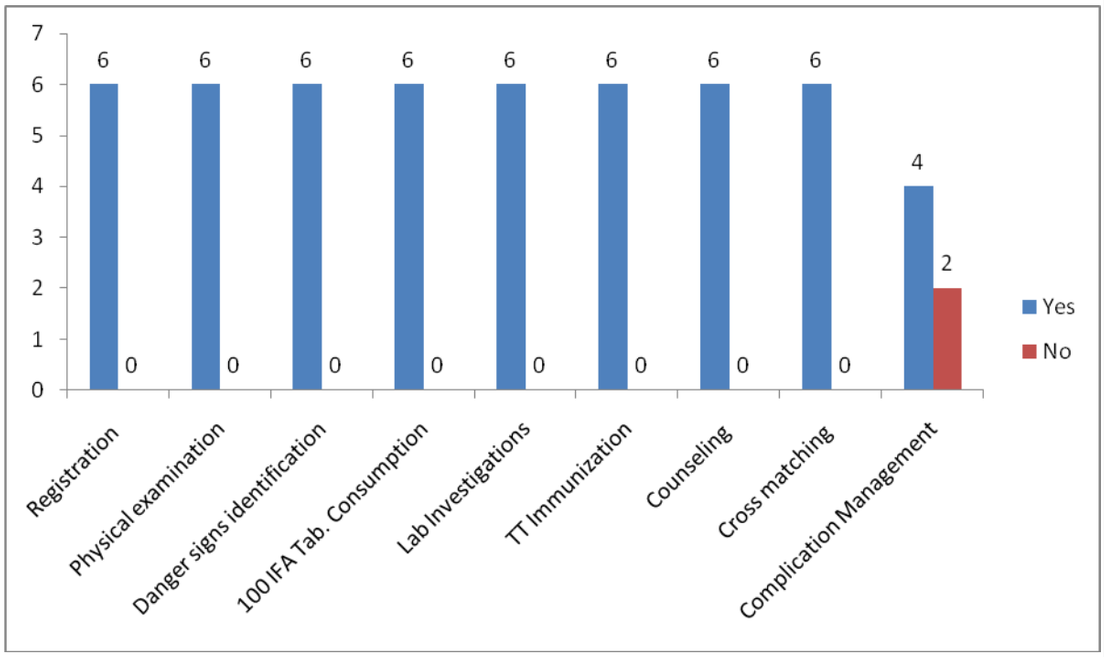
OBJECTIVE 2 (PROCESS) - Assessment of the standards related to the service delivery framework i.e. Antenatal care, Intra natal care, Post natal care in a hospital (Process).

Total KAP (Knowledge, Attitude, and Practise in Intracare, Postnatal based on the questionnaire).

S.No.	Questions on Antenatal care	Dr. 1	Dr. 2	Dr. 3	Dr. 4	Dr. 5	Dr. 6
1	Registration (within 12 weeks)	Yes	Yes	Yes	Yes	Yes	Yes
2	Physical examination	Yes	Yes	Yes	Yes	Yes	Yes
3	Danger signs of Identification	Yes	Yes	Yes	Yes	Yes	Yes
4	100 IFA Tab. Consumption	Yes	Yes	Yes	Yes	Yes	Yes
5	Lab Investigations	Yes	Yes	Yes	Yes	Yes	Yes
6	TT Immunization	Yes	Yes	Yes	Yes	Yes	Yes
7	Counseling on Nutrition, abortion, etc.	Yes	Yes	Yes	Yes	Yes	Yes
8	Cross matching of blood	Yes	Yes	Yes	Yes	Yes	Yes
9	Management of complications	Yes	Yes	Yes	Yes	No	No

S.No.	ANC QUESTIONS	Yes	No
1	Registration (within 12 weeks)	6	0
2	Physical examination	6	0
3	Danger signs of Identification	6	0
4	100 IFA Tab. Consumption	6	0
5	Lab Investigations	6	0
6	TT Immunization	6	0
7	Counseling on Nutrition, abortion, etc.	6	0

8	Cross matching of blood	6	0
9	Management of complications	4	2



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S.No.	Questions on Intranatal care	Dr. 1	Dr. 2	Dr. 3	Dr. 4	Dr. 5	Dr. 6
1	Episiotomy & suturing cervical tear	Yes	Yes	Yes	Yes	Yes	Yes
2	Assisted Vaginal Deliveries	Yes	Yes	Yes	Yes	No	No
3	Stabilization of patients with obstetrics emergencies	Yes	Yes	Yes	No	No	No
4	Referral linkages with higher facilities	No	Yes	Yes	Yes	Yes	Yes
5	Management of obstructed labor	No	No	Yes	Yes	Yes	Yes
6	Surgical interventions like caesarean section	Yes	Yes	Yes	Yes	Yes	Yes
7	Comprehensive management of	Yes	Yes	Yes	Yes	Yes	Yes

	all obstetrics emergencies						
8	In house Blood Bank	No	No	No	No	No	No

Essential newborn care should include the following:-

S.No.	Questions on Intranatal care	Dr. 1	Dr. 2	Dr. 3	Dr. 4	Dr. 5	Dr. 6
1	Prevention of RDS (Respiratory Distress Syndrome)	No	Yes	Yes	Yes	Yes	Yes
2	Immediate Care of LBW newborns < 1800 gm	No	Yes	Yes	Yes	Yes	Yes
3	Vitamin K for premature babies	No	Yes	Yes	Yes	No	No

S.No.	INC QUESTIONS	YES	NO
1	Episiotomy & suturing cervical tear	6	0
2	Assisted Vaginal Deliveries	4	2
3	Stabilization of patients with obstetrics emergencies	3	3
4	Referral linkages with higher facilities	5	1
5	Management of obstructed labor	4	2

6	Surgical interventions like caesarean section	6	0
7	Comprehensive management of all obstetrics emergencies	6	0
8	In house Blood Bank	0	6
9	Prevention of RDS (Respiratory Distress Syndrome)	5	1
10	Immediate Care of LBW newborns < 1800 gm	5	1
11	Vitamin K for premature babies	3	3

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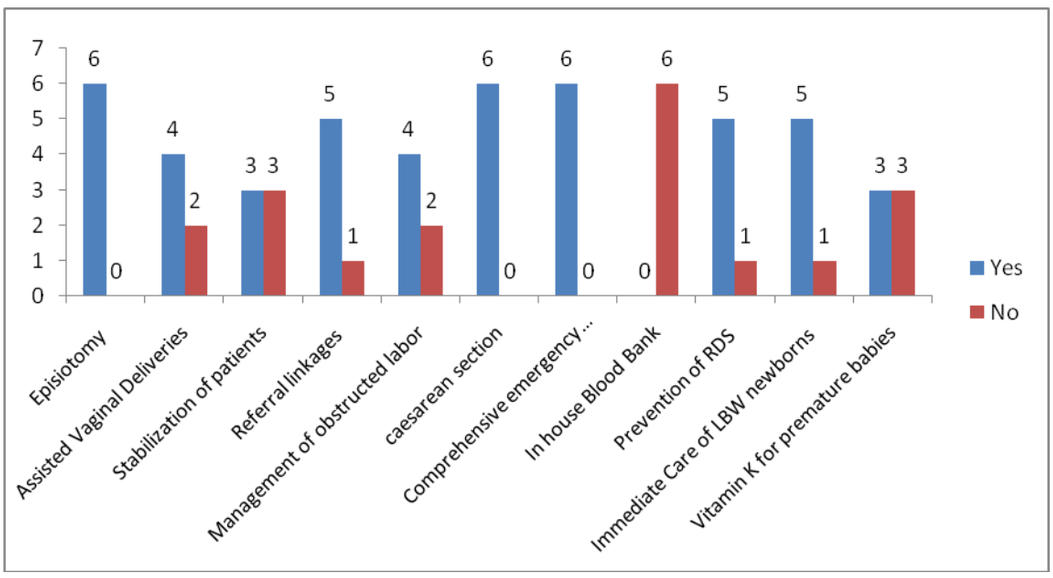

S.No.	Questions on Postnatal care	Dr. 1	Dr. 2	Dr. 3	Dr. 4	Dr. 5	Dr. 6
1	48 hrs stay post delivery	Yes	Yes	Yes	Yes	Yes	Yes
2	Referral of post natal complications	Yes	Yes	Yes	Yes	Yes	Yes
3	Stabilization of mother with post natal emergencies	Yes	Yes	Yes	Yes	Yes	Yes
4	Referral linkages with higher facilities	No	Yes	Yes	Yes	Yes	Yes
5	Clinical management of maternal emergencies	Yes	Yes	Yes	Yes	No	Yes

Essential newborn care should include the following:-

S.No.	Questions on Postnatal care	Dr. 1	Dr. 2	Dr. 3	Dr. 4	Dr. 5	Dr. 6
1	Immediate care of LBW	Yes	Yes	Yes	Yes	Yes	Yes
2	Stabilization of complications & referral	Yes	Yes	Yes	Yes	Yes	Yes
3	Management of Sepsis	Yes	Yes	Yes	Yes	No	Yes
4	Management of complications	No	Yes	Yes	Yes	No	Yes
5	Establish referral linkages	No	Yes	Yes	Yes	Yes	Yes

S.No.	PNC QUESTIONS	YES	NO
1	48 hrs stay post delivery	6	0
2	Referral of post natal complications	6	0
3	Stabilization of mother with post natal emergencies	6	0
4	Referral linkages with higher facilities	5	1
5	Clinical management of maternal emergencies	5	1
6	Immediate care of LBW	6	0
7	Stabilization of complications & referral	6	0
8	Management of Sepsis	5	1
9	Management of complications	4	2
10	Establish referral linkages	5	1

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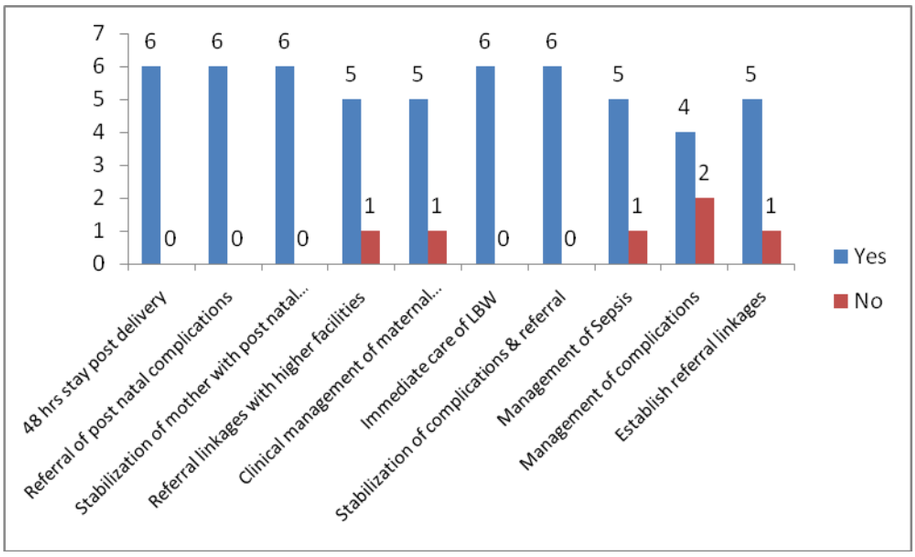

Total KAP (Knowledge, Attitude and Practices of Staff Nurses on Antenatal care, Intracare and Postnatal care based on the questionnaire)

S.No.	Questions on Antenatal Care	Staff Nurse-1	Staff Nurse-2	Staff Nurse-3	Staff Nurse-4	Staff Nurse-5	Staff Nurse-6
1	Registration (within 12 weeks)	Yes	Yes	Yes	Yes	Yes	Yes
2	Physical examination	Yes	Yes	Yes	Yes	Yes	Yes
3	Danger signs of Identification	Yes	Yes	Yes	Yes	Yes	Yes
4	100 IFA Tab. Consumption	Yes	Yes	Yes	Yes	Yes	Yes
5	Lab Investigations	Yes	Yes	Yes	Yes	Yes	Yes
6	TT Immunization	Yes	Yes	Yes	Yes	Yes	Yes
7	Counseling on Nutrition, abortion.	Yes	Yes	Yes	Yes	Yes	Yes
8	Cross matching of blood	Yes	Yes	Yes	Yes	Yes	Yes
9	Management of complications	Yes	Yes	No	Yes	No	No

S.No.	ANC QUESTIONS	YES	NO
1	Registration (within 12 weeks)	6	0
2	Physical examination	6	0
3	Danger signs of Identification	6	0
4	100 IFA Tab. Consumption	6	0
5	Lab Investigations	6	0
6	TT Immunization	6	0
7	Counseling on Nutrition, abortion, etc.	6	0
8	Cross matching of blood	6	0
9	Management of complications	3	3

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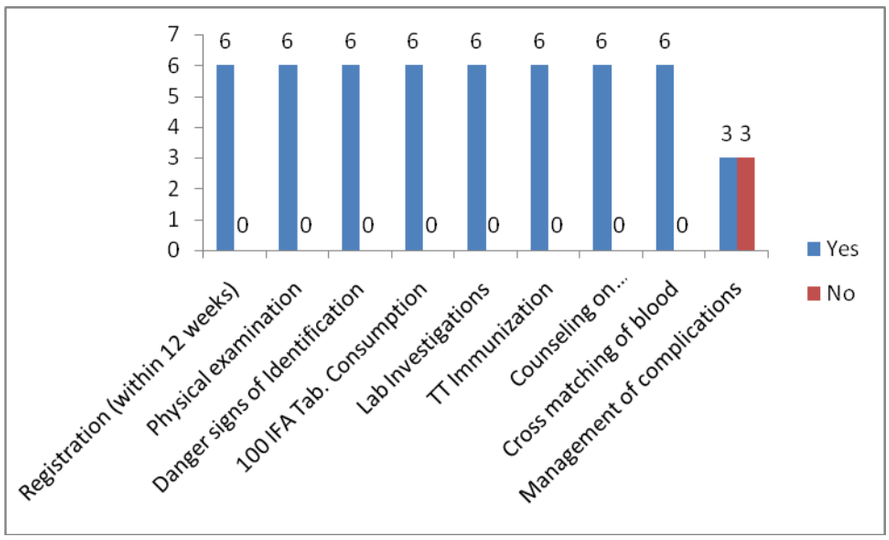

S.No.	Questions on Intranatal care	Staff Nurse-1	Staff Nurse-2	Staff Nurse-3	Staff Nurse-4	Staff Nurse-5	Staff Nurse-6
1	Episiotomy & suturing cervical tear	Yes	Yes	Yes	Yes	Yes	Yes
2	Assisted Vaginal Deliveries	Yes	No	Yes	Yes	No	No
3	Stabilization of patients with obstetrics emergencies	No	No	Yes	Yes	No	No
4	Referral linkages with higher facilities	Yes	Yes	Yes	Yes	Yes	Yes
5	Management of obstructed labor	Yes	Yes	No	No	Yes	Yes
6	Surgical interventions like caesarean section	No	No	No	No	No	No
7	Comprehensive management of all obstetrics emergencies	No	No	Yes	No	No	No
8	In house Blood Bank	Yes	Yes	Yes	Yes	Yes	Yes

Essential newborn care should include the following :-

S.No	Questions on Intranatal care	Staff Nurse-1	Staff Nurse-2	Staff Nurse-3	Staff Nurse-4	Staff Nurse-5	Staff Nurse-6
9	Prevention of RDS (Respiratory Distress Syndrome)	Yes	No	Yes	Yes	No	No
10	Immediate Care of LBW newborns < 1800 gm	Yes	No	Yes	Yes	No	Yes
11	Vitamin K for premature babies	Yes	Yes	Yes	Yes	Yes	Yes

S.No.	INC QUESTIONS	YES	No
1	Episiotomy & suturing cervical tear	6	0
2	Assisted Vaginal Deliveries	3	3
3	Stabilization of patients with obstetrics emergencies	2	4
4	Referral linkages with higher facilities	6	0
5	Management of obstructed labor	4	2
6	Surgical interventions like caesarean section	0	6
7	Comprehensive management of all obstetrics emergencies	1	5
8	In house Blood Bank	6	0
9	Prevention of RDS (Respiratory Distress Syndrome)	3	3

10	Immediate Care of LBW newborns < 1800 gm	4	2
11	Vitamin K for premature babies	6	0

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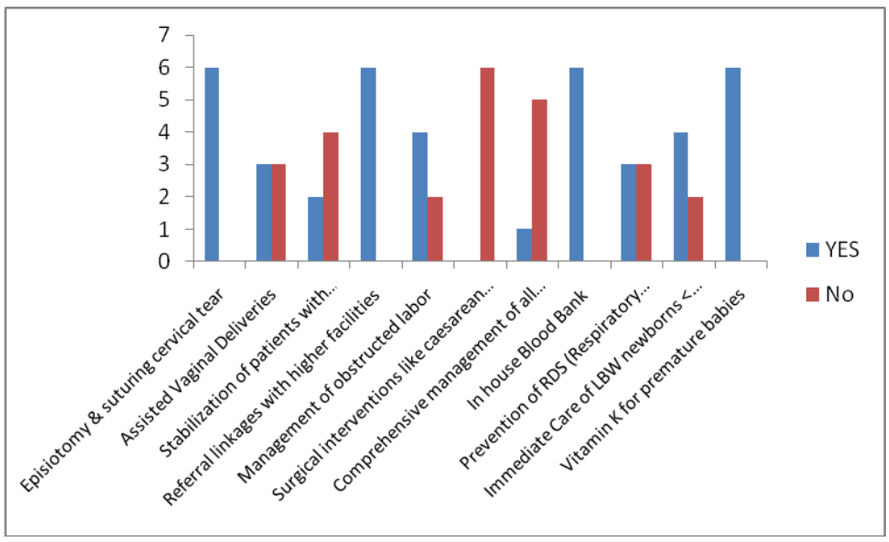


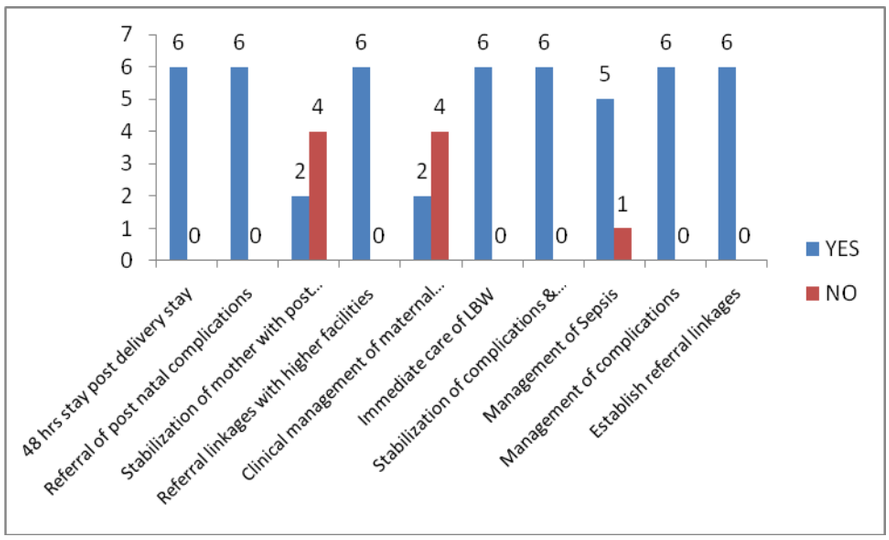
S.No.	Questions on Postnatal care	Staff Nurse-1	Staff Nurse-2	Staff Nurse-3	Staff Nurse-4	Staff Nurse-5	Staff Nurse-6
1	48 hrs stay post delivery	Yes	Yes	Yes	Yes	Yes	Yes
2	Referral of post natal complications	Yes	Yes	Yes	Yes	Yes	Yes
3	Stabilization of mother with post natal emergencies	Yes	No	No	Yes	No	No
4	Referral linkages with higher facilities	Yes	Yes	Yes	Yes	Yes	Yes
5	Clinical managemet of maternal emergencies	Yes	Yes	No	No	No	No

Essential newborn care should include the following :-

S.No.	Questions on Postnatal care	Staff Nurse-1	Staff Nurse-2	Staff Nurse-3	Staff Nurse-4	Staff Nurse-5	Staff Nurse-6
1	Immediate care of LBW	Yes	Yes	Yes	Yes	Yes	Yes
2	Stabilization of complications & referral	Yes	Yes	Yes	Yes	Yes	Yes
3	Management of Sepsis	Yes	Yes	Yes	Yes	Yes	No
4	Management of complications	Yes	Yes	Yes	Yes	Yes	Yes
5	Establish referral linkages	Yes	Yes	Yes	Yes	Yes	Yes

S.No.	PNC QUESTIONS	YES	NO
1	48 hrs stay post delivery stay	6	0
2	Referral of post natal complications	6	0
3	Stabilization of mother with post natal emergencies	2	4
4	Referral linkages with higher facilities	6	0
5	Clinical management of maternal emergencies	2	4
6	Immediate care of LBW	6	0
7	Stabilization of complications & referral	6	0
8	Management of Sepsis	5	1
9	Management of complications	6	0
10	Establish referral linkages	6	0

SAMPLE SIZE – 6



OBJECTIVE 3 (OUTCOME) – Total number of Normal Deliveries, Mortality, Complications and Referrals (in the month of February, March and April 2016)

Total number of Normal Deliveries:-

- February – 104
- March – 82
- April – 111

Total number of Mortality:-

- February – 0
- March – 0
- April – 0

Total number of Complications:-

- February – 8
- March –4
- April – 2

Total number of Referrals:-

- February – 3
- March – 1
- April -1

<u>Complication and Referrals:-</u>

All management of maternal emergencies such as PPH, Puerperal Sepsis, Eclampsia, Breast Abscess, Post surgical complications, Shock and any other post natal complications such as RH incompatibility etc are being tackled by the Medical Officers and in case of greater complication and referrals in the hospital.

OBJECTIVE 4 – To pin point the problems and bottle necks

- Specialists are not willing to join because of low remuneration given to them as compared to private sector.
- Shortage of Nursing staffs in delivery unit, more staffs need to be appointed.
- Lack of training and motivation among staffs.

2.8 RECCOMENDATIONS

- Referral Linkages need to be strong.
- Patient should be stabilized in the ward/casualty before moving to OT.
- In house Blood bank should be established as C-Section surgery takes place.
- Availability of Vitamin – k should be provided in hospital in sufficient quantity.
- RDS cases being seen in infant so management of RDS should be provided with the help of modern technology.
- More emphasis should be on management of obstructed labor and immediate care of LBW newborns.

2.9 CONCLUSION

The whole study was carried out to stream line the process in quality care in obstetrics and gynecology department.

- ✓ Patients must be stabilized first and then send to District Hospitals with Referral linkages with higher facilities.
- ✓ All parameters must be checked and patients must be stabilized before moving them to the OT.
- ✓ Blood Bank is an essential in a district hospital because c-section deliveries are focused on.
- ✓ Availability of Vitamin K is a must for infants.
- ✓ Respiratory Disease Syndrome is mostly seen in infants so it's management should be given top priority.

2.10 LIMITATIONS OF STUDY

1. Time constraint- 3 months period of dissertation was limited and implementation for all elements were not being done.
2. District Hospitals are often disorganised and system of work is not stream lined, so it was not possible to collect enough and accurate data.

2.11 BIBLOGRAPHY

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2.12 ANNEXURES

Questionnaire on Antenatal care, Intra Natal care and Post natal care prepared on the basis of service delivery framework for Medical Officers and Staff Nurses.

Questionnaire for Antenatal Care

S.No.	QUESTIONS ANC session should include	Response Yes	Response No
1	Whether Registration (within 12 weeks) is done?		
2	Whether physical examination+ weight +BP+ abdominal examination is done?		
3	Whether danger signs are identified and referred?		
4	Consumption of at least 100 IFA Tabs. (for all pregnant women)/200 (for anemic women) is ensured or not ? (Severe anemic needs referral)		

5	Essential lab investigations (HB %, urine for albumin/sugar, pregnancy test) done?		
6	TT immunization (two doses at an interval of one month) is done?		

7	Counseling on nutrition, birth preparedness, safe abortion and institutional delivery is done		
8	Cross matching of blood and management of anemia is done?		
9	Management of complications in pregnancy		

Questionnaire for Intranatal Care

S.No.	**Questions** **Availability of following services round the clock is ensured or not**	**Response Yes**	**Response No**
1	Episitomy and suturing cervical tear		
2	Assisted Vaginal deliveries like		

	outlet forceps, vacuum are conducted		
3	Stabilization of patients with obstetrics emergencies, e.g. Eclampsia, PPH, sepsis, shock		
4	Management of obstructed labor		
5	Surgical interventions like caesarean section		

6	Comprehensive management of all obstetric emergencies, e.g. PIH/ Eclampsia, Sepsis, PPH, retained placenta, shock etc.		
7	In house blood bank/ blood storage centre		
8	Referral linkages with higher facilities including medical colleges		

Essential Newborn care should include the following:-

9	Antenatal corticosteroids to the mother in case of pre-term babies to prevent respiratory disease syndrome (RDS)	
10	Immediate care of LBW newborns <1800 gm	
11	Vitamin K for premature babies	

Questionnaire for Postnatal care:-

S.No.	Questions Availability of following services round the clock is ensured or not	Response Yes	Response No
1	48 hours post stay delivery and all the post natal services for zero and third day to mother and baby		
2	Timely referral of women with post natal complications		
3	Stabilization of mother with post natal emergencies, PPH, Sepsis, shock, retained placenta		
4	Referral linkages with higher facilities		
5	Clinical management of all maternal emergencies such as PPH, Puerperal Sepsis, Eclampsia, Breast Abscess, post surgical complication, shock and any other post natal complications such as RH incompatibility .		

Essential Newborn Care is provided through SNCU and should include the following:-

6	Immediate care of LBW newborns < 1800 gm		
7	Stabilization of complications and referral		
8	Management of sepsis		
9	Management of complications		
10	Establish referral linkages with higher facilities		

THE SERVICE DELIVERY FRAMEWORK

Antenatal Care (Minimum 4 ANCs including registration)

Level 1 **SBA Level**	**Level 2** **Institutional (Basic Level)**	**Level 3** **Institutional (Comprehensive Level)**
Delivery by SBA's(Sub-Centre, PHC's not functioning as 24*7 and home deliveries conducted by SBA)	PHC – Basic Obstetrics and Neonatal Care (24*7 PHCs, CHCs, other than FRUs)	FRU – Comprehensive Obstetric and Neonatal Care (DH, SDH, selected CHCs)
ANC delivery should include :- • Registration (within 12 weeks)	All in level 1 + blood grouping & Rh typing, Wet mount (saline/KOH), RPR/VDRL	All in level 1 + blood cross matching + management of severe anaemia
• Physical examination+ weight +BP+ abdominal examination	Management and provision of all basic obstetrics & newborn care including management of all complications other than those requiring blood transfusion or surgery	Management of complications in pregnancy referred from Level 1 and 2

• Danger signs are identified and referred	Linkages with nearest ICTC/ PPTCT centre for voluntary counseling and testing for HIV and PPTCT services	
• Consumption of at least 100 IFA Tabs. (for all pregnant women)/200 (for anemic women) (Severe anemic needs referral)		
• Essential lab investigations (HB %, urine for albumin/sugar, pregnancy test)		
• TT immunization (two doses at an interval of one month)		
• Counseling on nutrition, birth preparedness, safe abortion and institutional delivery		
• Assured referral linkages for complicated pregnancies and deliveries		

Intra natal Care

Level 1 SBA Level	**Level 2 Institutional (Basic Level)**	**Level 3 Institutional (Comprehensive Level)**
Delivery by SBA's(Sub-Centre, PHC's not functioning as 24*7 and home deliveries conducted by SBA)	PHC – Basic Obstetrics and Neonatal Care (24*7 PHCs, CHCs, other than FRUs)	FRU – Comprehensive Obstetric and Neonatal Care (DH, SDH, selected CHCs)

• Normal delivery with the use of partograph • Active mgmt. of third stage of labor • Infection prevention • Identification and referral for danger signs • Pre – referral mgmt. for obstetric emergencies, e.g. eclampsia, PPH, shock • Assured referral linkages with higher facilities Essential new care will include:- • Neonatal resuscitation • Warmth • Infection prevention • Initiation of breast feeding within an hour of birth	All in level 1 + Availability of following services round the clock • Episitomy and suturing cervical tear • Assisted vaginal deliveries like outlet forceps, vacuum • Stabilization of patients with obstetrics emergencies, e.g. eclampsia, PPH, shock, sepsis • Referral linkages with higher facilities Essential new born care as in level 1 + • Immediate care of LWB newborns (>1800 gm) • Vitamin K for premature babies	All in level 2 + availability of the following services round the clock:- • Mgmt. of obstructed labor • Surgical intervention like Caesarean section • Comprehensive management of all obstetric emergencies, e.g. PIH/ Eclampsia, Sepsis, PPH, retained placenta, shock etc. Essential new born care as in level 2 + • Care of LBW newborns < 1800 gm • Care of sick newborns • Vitamin K for premature babies

<u>Postnatal and Newborn Care</u>

Level 1 **SBA Level**	**Level 2** **Institutional** **(Basic Level)**	**Level 3** **Institutional** **(Comprehensive Level)**
Delivery by SBA's(Sub-	PHC – Basic Obstetrics and	FRU – Comprehensive

Centre, PHC's not functioning as 24*7 and home deliveries conducted by SBA)	Neonatal Care (24*7 PHCs, CHCs, other than FRUs)	Obstetric and Neonatal Care (DH, SDH, selected CHCs)
• Minimum 6 hrs stay post delivery • Counseling for feeding, nutrition, family planning, hygiene, immunization and PN check – up • Warmth • Hygiene & cord care • Exclusive breast feeding for 6 months • Referral linkages for mgmt. of complications • Care of LBW newborns < 2500 gm • Zero day immunization OPV, BCG.	All in level 1 + • 48 hrs stay post delivery & all the post natal services for zero and third day to mother & baby • Timely referral of woman with postnatal complications • Stabilization of mother with postnatal emergencies, e.g. PPH, sepsis, shock, retrained placenta • Referral linkages with higher facilities	All in level 2 + • Clinical mgmt. of all maternal emergencies such as PPH, Puerperal sepsis, Eclampsia, Breast Abscess, Post surgical complication, shock and any other postnatal complications such as RH incompatibility etc.