

PROJECT-CLINICAL AUDIT ON INDICATIONS OF LOWER SEGMENT CEASAREAN-SECTION

	OBSERVATIONAL LEARNING	
DEPARTMENT	STRENGTH	GAPS
IPD PHARMACY	Drugs are kept in organized manner, LASA drugs are kept separately and inventory is managed by ABC analysis,. High risk and narcotics drugs are kept under lock & key.	Space constraint, no call bell inside walking cooler, no supervisor during nightshift
KITCHEN		Gloves were not used by food handlers, Food handler had long nails, daily temperature was not recorded for walking cooler, daily cleaning sheet was not filled for food trolley
EMERGENCY DEPARTMENT	Staff is trained and competent, Records are maintained, jump kit and disaster kit is stored properly	Shortage of ambulance driver, City's & NCR region map not available with ambulance driver
BLOOD BLANK	Staff is trained and competent, record maintenance was excellent, preventive maintenance was placed on all equipment	Blood bags are not carried in trays or thermocol boxes, post care instructions are not written bilingually
GAS MANIFOLD		No CCTV is present in gas manifold area, liquid oxygen tank is not covered by shed
CSSD	State of art equipments, experienced staff, strong focus on sterilization, its monitoring and continuous physical, chemical, biological monitoring is done	

PROBLEM STATEMENT:

The rate of LSCS in the hospital is exceeding the standard set by WHO, so determining the indications of LSCS and level of compliance to national and international standard by a clinical audit.

OBJECTIVE:

- To determine the LSCS rate in the hospital.
- To determining the indications of LSCS

METHODOLOGY:

Study design-

It is descriptive cross-sectional study based on existing data within a specified period. It is required to evaluate preferred aspects of concern for cesarean deliveries. It is designed to determine the indications of LSCS.

Study area-

The study area is Asian institute of medical sciences.

Sampling and sample size-

Non-probability Convenience sampling, during the duration all files from 31st December to 30th April has been audited. Total 103 files have been audited.

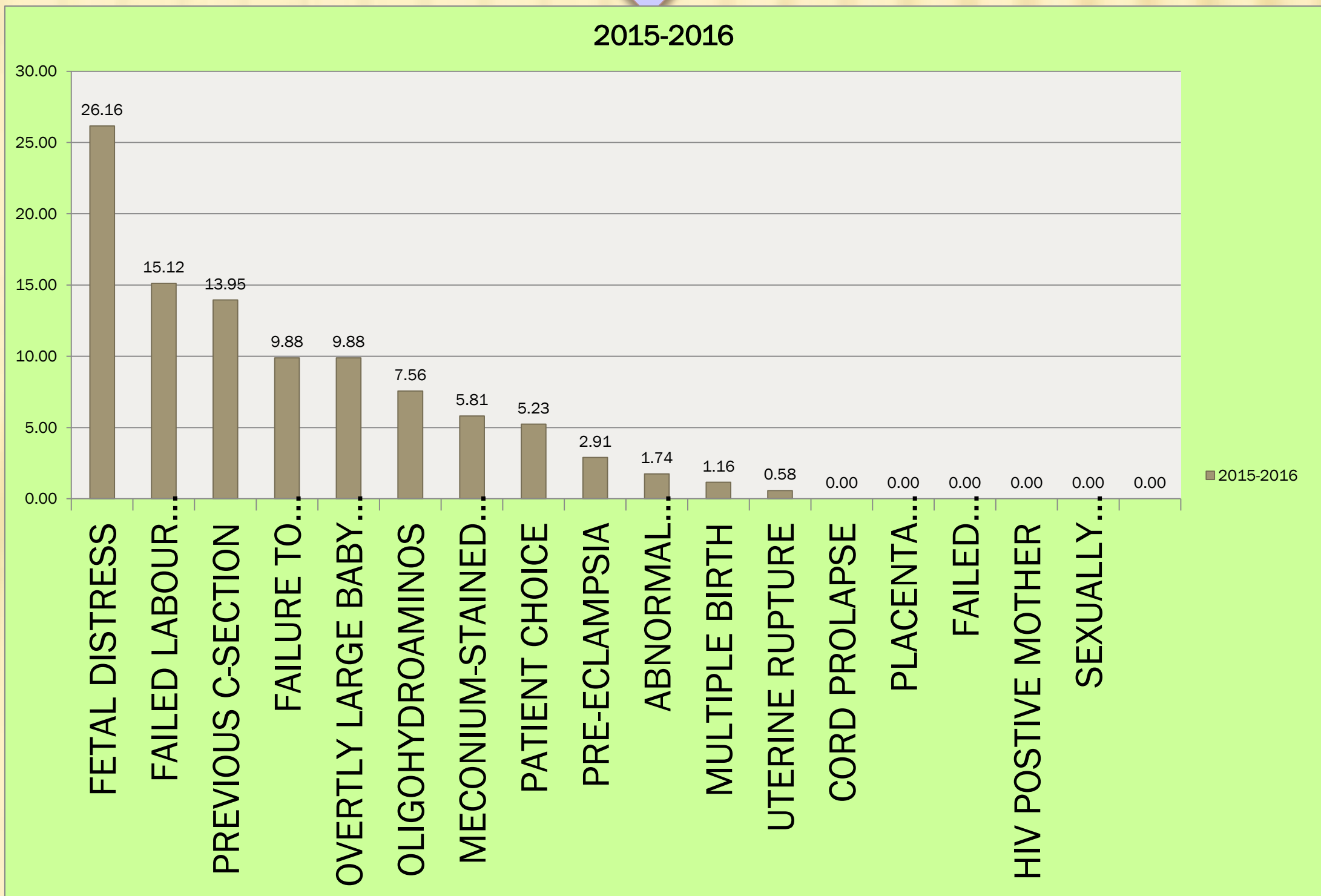
Study tool:

A qualitative tool (checklist) was designed in which indications of LSCS were noted down and approved by Director Gynecology.

Data collection:

The information is collected from the face sheet, history notes, progress sheet, labour chart, operation notes and discharge summary, and then the 10% of sample is discussed with DNB students and Director Quality.

LSCS rate in hospital varies from the standard set by WHO to find out the reason for this deviation indications of LSCS were determined



Reasons for fetal distress among these patients

- Failed labour induction
- Non progress of labour
- Cephalo- pelvic disproportion
- Oligohydroamnios
- Meconium stained liquor
- Decreased fetal movement
- Cord around the neck
- Premature rupture of membrane
- Gestational diabetes mellitus
- Intra –uterine growth restriction
- Pre –mature labour pain
- High resistance in umbilical artery
- Persistent tachycardia
- Post-term pregnancy

GAPS IDENTIFIED

- ✓Final diagnosis is not properly mentioned in discharge summary as mentioned on face sheet.
- ✓Lot of abbreviations are used.
- ✓Labour chart is not signed by the staff.
- ✓Root cause is not mentioned properly on the progress sheet.
- ✓In 20% of consent forms risks were not mentioned

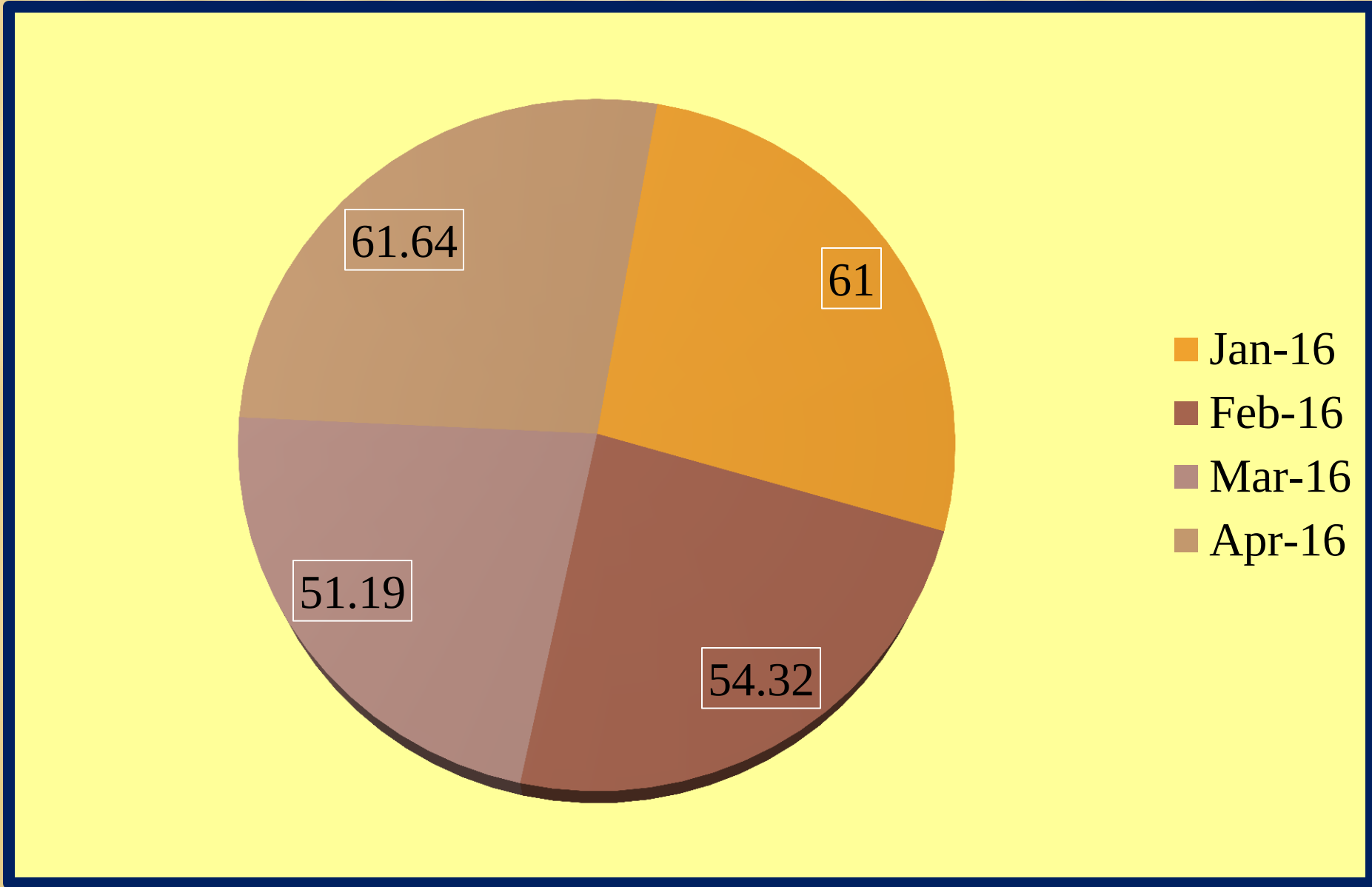
RECOMMENDATIONS:

- ❖This audit and its finding should be circulated widely to all the staff of Gynecology department.
- ❖Documentation need to improve more.
- ❖Clinical audits of this nature should be made regular and routine to improve the standard of care over time.

CONCLUSION:

- ❑LSCS rate was high (57.04%) as per the WHO recommended rate.
- ❑The most common indication found in patient is fetal distress.
- ❑Records are properly maintained and few documentation gaps were found.
- ❑Clinical audit helps in improving the documentation and record keeping

Standard rate for LSCS according to WHO is 17-18%



Average LSCS for these 4 months is 57.04% in AIMS

- In 103 patients 172 indications were found.
- In 45 patients only 1 indication was present.
- In 48 patients 2 indications were found.
- In 9 patients 3 indications were present.
- Only in 1 patient ,4 indications were found: oligohydroamnios, Meconium stained liquor, failed labour induction that leads to fetal distress.
- Among the above stated indications most common indication found was fetal distress.

OBJECTIVE:

The project is designed to identify various hazards in blood bank, analyzing the risks due to hazard and quantifying the risk on the basis of likelihood and severity using a risk matrix thus increasing donor, patient and staff safety level

METHODOLOGY:

Study Design: Cross-sectional study

Study Tool: Risk Matrix

Data Collection :-

Information gathered by direct observation, Communicating with the blood bank staff (Technicians) and Checking of records.

PROCESS	POTENTIAL HAZARDS	P	S	RS	RR	CONTROLS
1.DONOR REGISTRATION	Risk of professional donor	2	3	6	M	Professional donor are identified by the staff and deferred from donation.
2.DONOR SCREENING	Incorrect reading on hemoglobinometer/syphgnomanometer/weighing machine	2	3	6	M	Calibration of equipment is done timely.
	Donor infectious disease or past history is not documented.	3	3	9	M	Policy is defined, question is added to the consent form and infectious disease status is documented.
	Needle stick injury	2	3	6	M	Staff are being adequately trained on needle stick injury.
3.PHLEBOTOMY	wrong segment number/blood group/collection date mentioned on bag.	3	3	9	M	Staff should cross-check the entries.
	Incorrect technique of puncturing the vein can lead to damaging of underlying muscles, nerve, tendon, hematoma.	2	3	6	M	Staff should cross-check the entries.
	Improper monitoring leads to hypotension,syncope,shock etc	2	3	6	M	Assigned staff or assistant timely observe the donor during the whole procedure of phlebotomy.
4.APHERESIS	Donor may be in window period	2	3	6	M	In routine Staff or blood bank instruct to use chemiluminescence method.
	Improper adjustment of kit leads to contamination of red cell with platelet and kit wastage.	1	3	L	L	Staff is trained and competent
5.POST DONATION CARE	Donor is not guided properly after donation which can lead to cold sensation, dizziness, nausea, ,hematoma,pain,bleed at the site , allergy or shock.	2	3	6	M	Donor counseling is being done and poster is display on wall .Regular and timely training to the staff for handling these complications, provision of oxygen cylinders and emergency drugs for the same.
6.COMPONENT PREPRATION	Malfunctioning of equipment	2	3	6	M	Calibration of equipment is done timely. Preventive maintenance label is in place and any malfunctioning report to the biomedical engineer.
	Rupture of bag and spillage inside the centrifuge.	2	3	6	M	Staff is trained and competent
7.TTI	Test results are read wrongly lead to infusion of contaminated blood without taking precautions	2	3	6	M	Staff is trained and competent
8.CROSS MATCHING	Error in interpretation of results leads to infusion of a wrong unit	2	3	6	M	Staff is trained and competent
9.COMPONENT STORAGE AREA	Leaking of bag	2	3	6	M	Bags are monitored regularly
10.REPORTING	Failure to deliver urgent requirement of blood	1	3	3	3	Staff respond immediately to the urgent/special requirement of blood and noted in the log book and place on the notice board and deliver urgent requirement of blood within 30 minutes of defined time frame.
11.DISCARD	Not putting the bag in biohazardous red bag.	1	3	3	L	Defined policy , bag is autoclaved in the biohazardous red bag and then sends for incineration.

RISK MATRIX		PROBABILITY				
		Frequent	Likely	Occasional	Seldom	Unlikely
		5	4	3	2	1
S E V E R I T Y	Catastrophic	E	E	H	M	L
	4	20	16	12	8	4
	Critical	H	H	M	M	L
	3	15	12	9	6	3
	Marginal	H	M	M	L	L
	2	10	8	6	4	2
	Negligible	M	L	L	L	L
	1	5	4	3	2	1

OPERATIONAL HAZARD:

- Wrong identification of blood group due to substandard antisera or unfresh pool cells
- Improper monitoring of donor
- Multiple puncture at the phlebotomy site
- Aseptic techniques are not followed
- Donor is not guided properly
- Improper sealing of bag
- Improperly fit tubing of bag in Optipress
- Fall of bag
- Wrong documentation of :
 1. donors infectious disease or past history
 2. wrong id placed on tubes, blood bag or in register
 3. wrong expiry on the blood bags
- Improper placement of bag in centrifuge
- Improper adjustment of kit during Apheresis
- Wrong programming in centrifuge
- If stored unscreened blood in screened blood area
- Leaking of bag
- Storing PRBCs, FFP, Platelet at incorrect temperature
- Test results are read wrongly
- TTI sticker not placed on the bag
- Pilferages
- Untimely delivery of units
- Issuing of wrong blood group
- Not putting the bag in biohazardous red bag

BIOLOGICAL HAZARD:

- Leaking of bag
- Exposure of staff to unscreened blood
- During preparation of component , contamination of RBC with FFP
- During Apheresis contamination of red cell with platelet
- Transmission of unscreened blood from donor to patient

MECHANICAL HAZARD:

- ❖ Malfunctioning of Sphygmomanometer
- ❖ Malfunctioning of Haemoglobinometer
- ❖ Malfunctioning of Weighing machine
- ❖ Malfunctioning of Refrigerated centrifuge
 - ❖ Malfunctioning of Optipress
- ❖ Malfunctioning of Refrigerator
 - ❖ Malfunctioning of Incubator

RECOMMENDATIONS:

- Advised to carry blood bags in box /basket or in a tray from phlebotomy room to component preparation room.
- Post donation care instructions displayed in phlebotomy and in apheresis room should be bi-lingual.
- Provision of “Back-ups” for platelet agitator.
- All entries should be cross-checked with two identifiers.
- Donors can be provided with the leaflet or booklet having post donation instructions.
- Staff should use personal protective equipment during procedure.

CONCLUSION:

The application of this study is used in blood bank by identifying, analyze and prioritize all hazards in blood bank department. This case study takes into account for the vulnerabilities of a specific hazard, consequences if a hazard is realized and means to prevent those hazard.

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