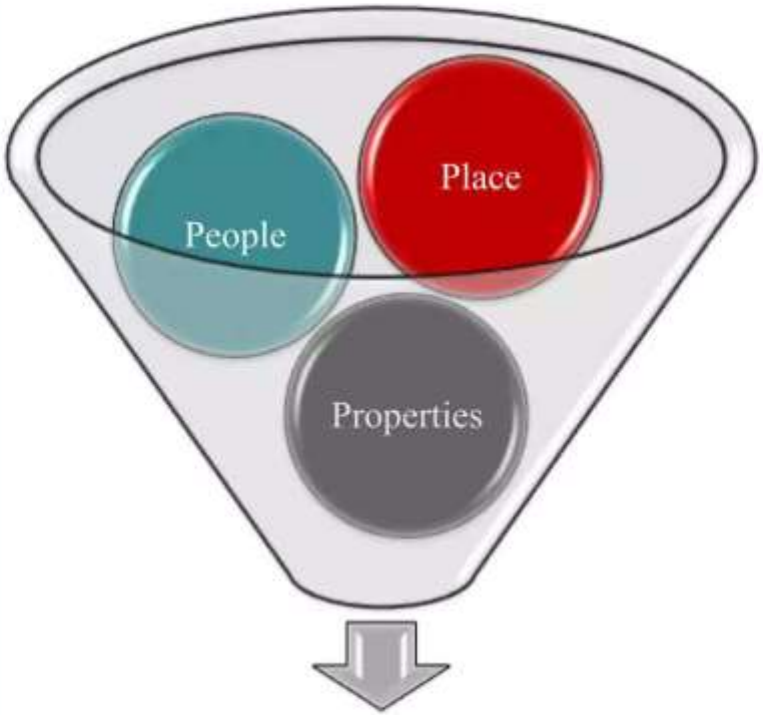
What is Safety?

- S – Sense the error
- A – Act to prevent it
- F – Follow Safety Guidelines
- E – Enquire into accident/Deaths
- T - Take appropriate remedial measure
- Y – Your responsibility

Why Safety in the Hospital ?

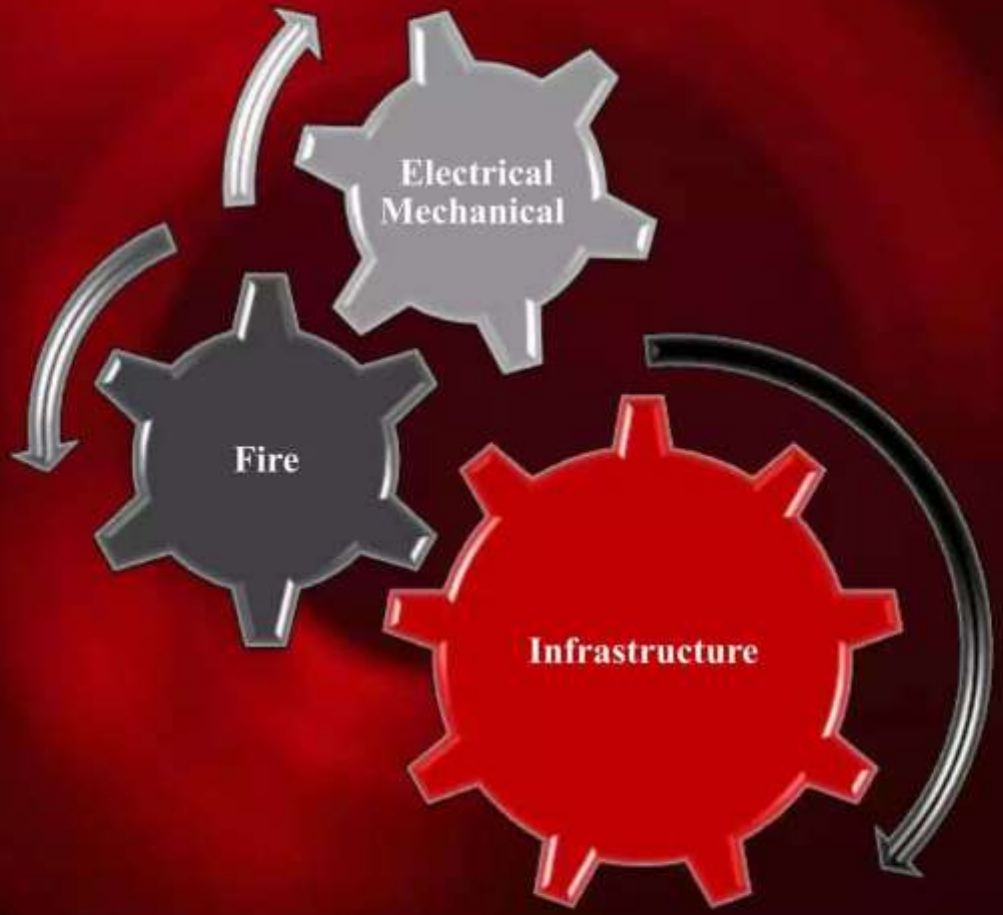
1. Hospital is a people intensive place
2. Provide services to sick people round the clock/24 hours daily
3. people have free access to enter any part of hospital any time for advise and treatment
4. The atmosphere of hospital is filled with emotions, excitement, life, happiness, death, sorrow.
5. Since hospital operates under continues strain, it gives rise to irritation, confrontation, conflicts and aggression.

Who's Safety ?



Hospital Safety

Safety of Place



Safety of Property

Safety of People

Patient Safety

- Patient safety is the absence of preventable harm to a patient during the process of health care.
- The discipline of patient safety is the coordinated efforts to prevent harm to patients, caused by the process of health care itself.
- It is generally agreed upon that the meaning of patient safety is …
- **Please do not harm**

Origin of Patient safety concept

Hippocratic Oath

- I will prescribe regimens for the good of my Patients according to my ability and my judgment and " never do harm" to anyone.
- Improving patient safety maens reducing patient harm.
- Hospital were funded to give care to those who need it and to keep patient safe is their moral duty.

Current Environment

- Error & system failure repeated
- Action on known risks is very slow
- Detection system is their infancy
- Many events not reported
- Understanding of causes limited
- Few examples of successful sculpt up
- Limited measurement of impact
- Blame calture alive and well
- Defensiveness and secrecy

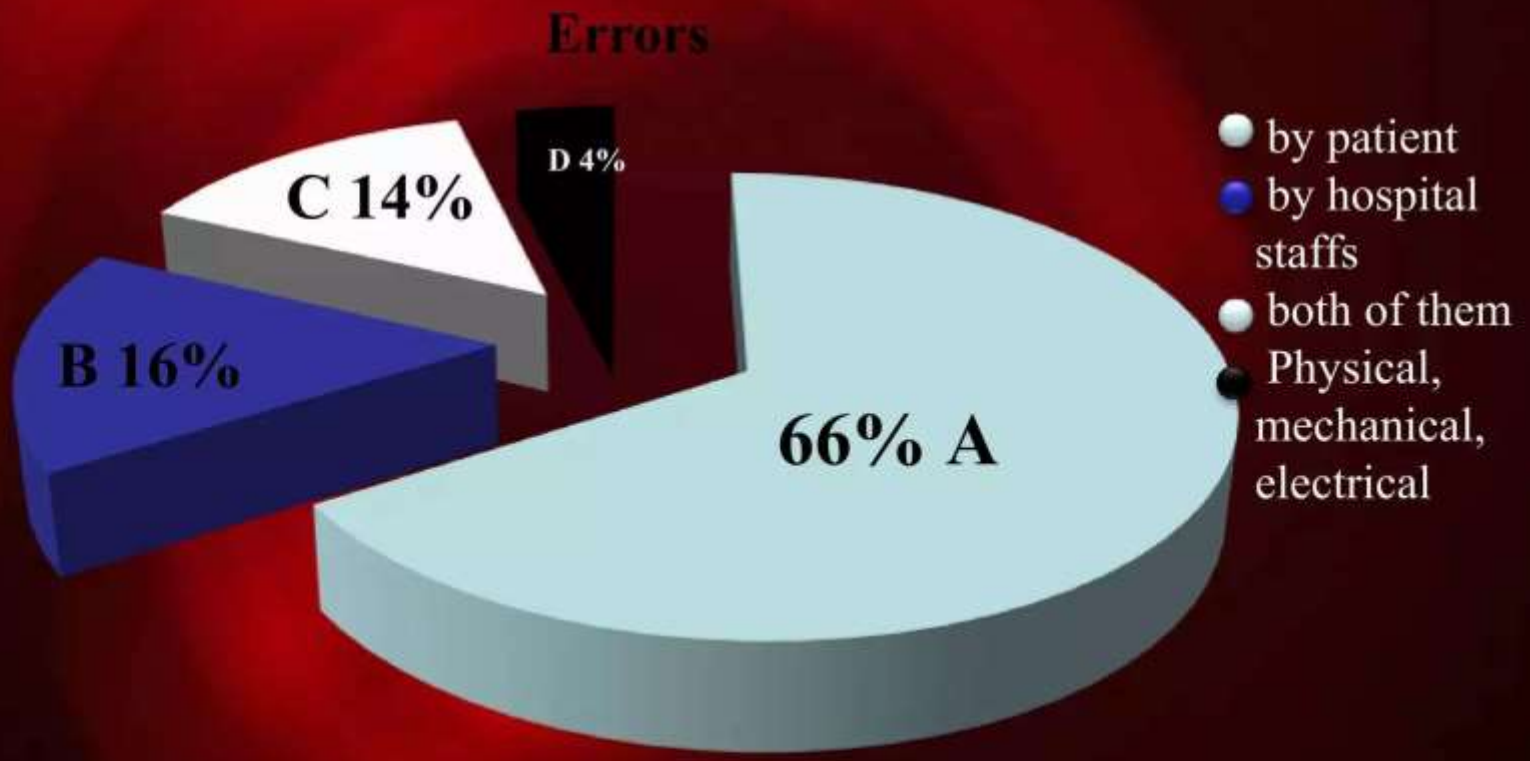
Medical Errors

- 1 in10 patients admitted to hospital suffers and adverse event
- The Institute of Medicine in their study found out that in USA.
- Medical Error injures 1 in 25 hospital patients.
- Kill about 44000 in 98000 patients every year.

How dangerous is Healthcare ?

- Less than one death per 100,000 encounters
  - Nuclear power
  - European railroads
  - Scheduled airlines
- One death in less than per 100,000 but more than 1000 encounters
  - Driving
  - Chemical manufacturing
- More than one death per 1000 encounters
  - Mountain climbing
  - **Healthcare**

Who's Error ?


Errors
D 4%
C 14%
B 16%
66% A
by patient
by hospital staffs
both of them
Physical, mechanical, electrical

Why Error ?

- In most cases fault is not willful negligence but systemic flaws, inadequate communication and wild spread process variation and patient ignorance.

- People responsible are the doctors, nurses, pharmacists, technicians and patient.

Types of Errors

- Adverse Health Care Event (during clinical care and causing physical or psychological injury to patient)
- Error (use of incorrect plan action)
- Heath Care Near Miss (Situation in which event or neglect during clinical care fails)
- Adverse Drug Reaction (Prophylaxis, diagnosis, therapy)
- Medication Errors
- Sentinel Errors: (Surgery on the wrong body part, surgery on the wrong patient, patient receive the wrong medicine)

Focus on near misses

- No patient harm
- No guilt
- No fear of litigation
- Focus on future prevention

Human Errors

- Every Error has a root cause and every cause has a solution.
- One Un willful Error is a Miss
- Repeated Error is a Crime
- Error can be prevented with every one's initiative in the system

HEAR COMES THE ROLE OF PATIENT SAFETY

WHA initiative

- Jan 2002: Executive Board discuss patient safety
- May 2002: resolution adopted by 55th World Health Assembly.
- May 2004: WHA support establishing World Alliance for Patient Safety
- October 2004: launch of the World Alliance and Forward program by WHO
- December 2005: First progress report of the alliance

WHO/ World Alliance for Patient Safety

Co-ordinate, spread and accelerate improvement in patient safety worldwide.

WHO Patient safety was created to facilitate the development of patient safety improvement across the world.

Our mission.

The mission of WHO Patient safety is to coordinate , facilitate and accelerate patient safety improvements around the world by

1. Being a leader and advocating for change.
2. Generating and sharing knowledge and experiments.
3. Supporting Member State in their implementation of patient safety actions.

And Our visions

Every patient receive safe healthcare, every time and every where.

10 actions of World Alliance for Patient Safety

Global patient safety challenges:
- Clean care is safer care
- Safe surgery save lives

Solution to improve Patient safety

High 5s WHO project

Patient for patient safety

Technology for patient safety

Research for Patient Safety

Knowledge Management

International classification for Patient Safety (ICPS)

Special projects
- Education
- Radiothtrapy
- Rewarding excellence
- When things go wrong
- Vincristine Sulphate

Reporting & Learning

High 5s WHO project

High 5s Steering Group was established in 2006to determine the architecture of the initiative. The project has three phase:

The first: (2006-2008) has involved the identification of five evidence based solutions for patient safety and development of Standard Operating Protocol (SOP).

The second: (2008-2010) identify a lead technical agency in each participating country to coordinate the High 5s at country level.

The third: (2010- 2011) the project will encourage participating countries to use their estabilished relationships with other countries.

Patient Safety Initiative

Patients know that their ailments may not always cured, but they don't expect to be "inadvertently harmed" during medical care.

- The "blame & train" approach to medical errors.
- Human factors engineering technique teas out "root cause" of medical errors and close calls.
- Playing "Blame Game": an "ineffective strategy" for improving patient safety.
- Preventing inadvertent harm to patients requires use of " human factors engineering principles"
- In other systems such as airplane flying and running nuclear reactors system have been developed to minimize risks based on the "human factors engineering".

Therefore concept of patient safety has been derived from Aviation Industry"

Shared Patient Safety Behaviors Aviation & Medicine

Broaden Dimension

- Human factors engineering
- fatigue & stress management
- Effective communication
- Shared awareness
- Teamwork

Countermeasures

- Briefings, debriefings
- Workload distribution
- Cross-monitoring
- Grated assertiveness
- Checklists

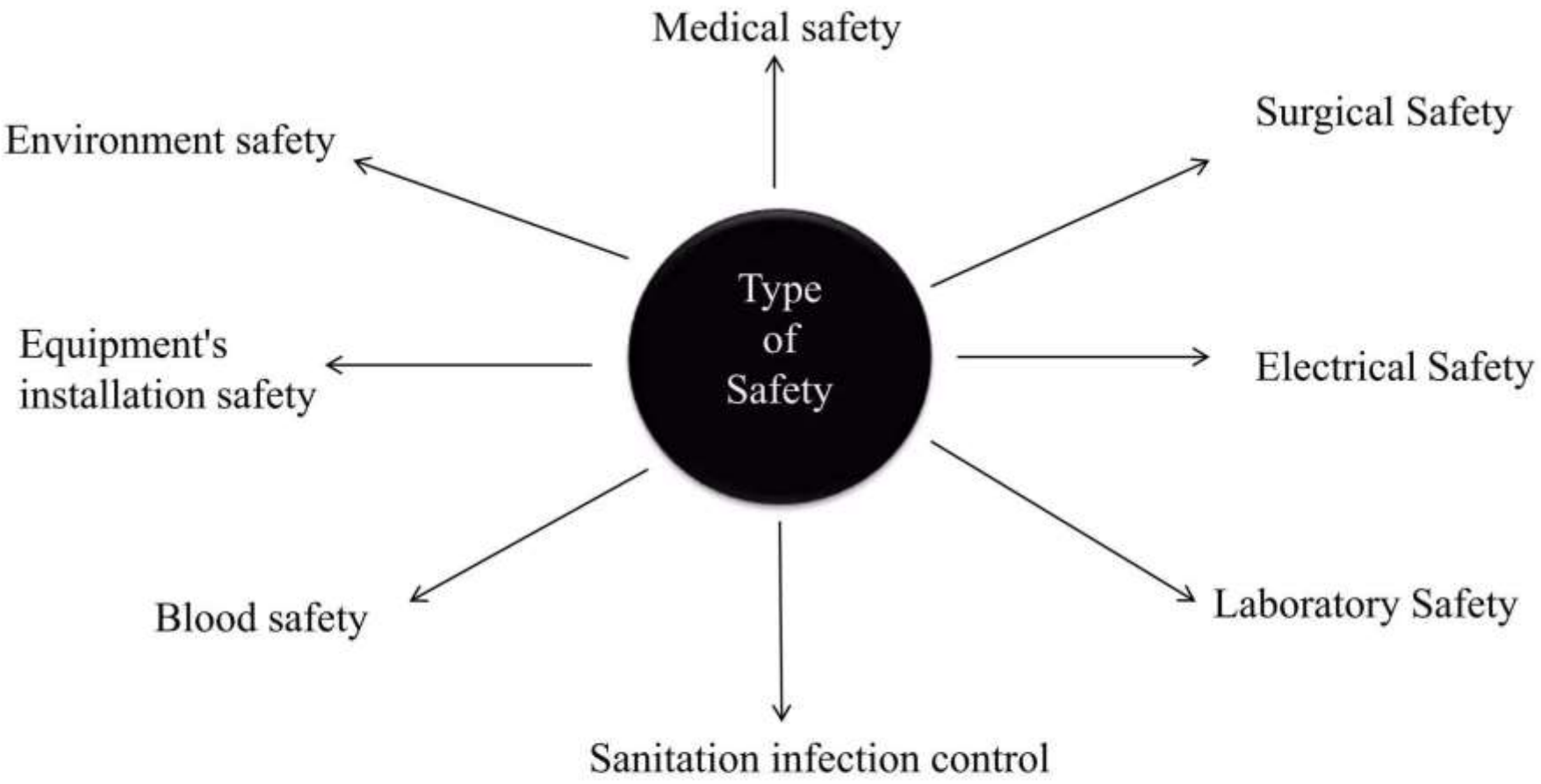
Patient Safety Goals

- Improve accuracy of patient identification
- Improve the effectiveness of communication among caregivers
- Improve the safety of using medications
- Reduce the risk of healthcare associated infections
- Accurately and completely reconcile medications across the continuum of care.
- Reduce the risk of patient harm resulting from falls.
- Special emphasize on Dangerous abbreviations, infection control, “Look alike and sound alike” medications, time outs.

Principle of Patient Safety (5P)

i. Right Drugs
ii. Right Patient
iii. Right Dose
iv. Right Route
v. Right Time

Type of Safety



Work Environment Safety

There is the direct link between work environment and patient safety. therefore, if not addressing work environment , we are not addressing patient safety.

Creating healthy work environment issues, little will change long-standing traditions.
So, everyone must be involved in the creation of healthy work environment, the onus is on **organization, department and unit leaders to ensure that it happens.**

Environment Safety

- Adequate light
- Adequate ventilation, exhaust fan
- Stairs with hand rails
- Window- door- closer
- Slip preventing floors
- Fire extinguishers and alarms
- Prevent noise pollution
- Heavy and fixed bed
- Safe wheel chairs and trolley
- No water logging in bathrooms
- Call bell system for patients
- Adequate no ogf bed screen to maintain privacy patient.

Medication Safety

A. Medication orders should be written legibly in ink and should include:

- Patient name
- Medication Generic name
- Dosage, frequency and rout of administration
- Signature of physician
- Date and hour was written

B. Any abbreviations used in medication orders should be agreed to and jointly adopted by medical, nursing, pharmacy and medical records staff.

Medical Safety

C. Before dispensing the drug, the pharmacist must receive the physician's original order or a direct copy of the order (except in emergency stations)

D. To check at least two patient identifiers before providing care, treatments or services. **Patient name** and **medical record number.**

E. Discourage Telephonic orders, Do not accept verbal order.

F. Examine safety code.

Methods of Sending the Physician's orders

- **Self copying orders form** there are two basic format:
  - Order for medications included among treatment orders.
  - Medication orders separated from other treatment orders on the order form.

- **Electromechanical**

(Copying machine or similar device)

- **Computerized**

Surgical Safety

1. Consent of the patient/relative in writing
2. Proper identification of patient , name wrist band
3. Proper identification mark of parts to be operated
4. Pre anesthetic check up
5. Anesthetic safety
6. Ensure no foreign body left inside
7. Safety measures form ward OT and coming back
8. Prevention of surgical wound infections
9. Use of surgical safety preformat in all operation
10. Check safety code if available

DNR: Do not resuscitation.

DNR	Purple
Fall Risk	Yellow
Allergic	Red

Installations Hazards

- Regular checking of equipment.
- Proper earthling to avoid shock
- Regular maintenance & repair
- Training of nurses & technical staff
- How do you control hazards?
  - Preventing inadvertent harm to patient requires use of human factors engineering principles
- The hierarchy of hazard's control
- Eliminate hazards
  - Guard against hazards
  - Warn against hazards

New Devices

- Acceptance, safety inspection, compatibility, education, procedures and appropriate purchasing documents

- When in doubt, have CE (Certified Equipment) check, Supply Chain Management (SCM).

Why Reporting Medical Devise Problem ?

- Prevent future problem
- Achieve performance improvement goals
- Assist risk management
- Provide information to manufacturers or food and drug administration

When to Report ?

When you think a device has or may have caused or contributed the following outcomes for patient, staff member or visitor.

- Death
- Serious injury
- Minor injury
- Close calls or other potential harms.

Individuals Role

- Identify actual and potential problems, adverse events, close calls with medical services.
- Report the problem or adverse event to supervisor, according to policy and procedure.
- Make sure your report includes details
- Remove the device, keep all affected items, save the packaging .

Electrical Safety

- Safety fuses with each equipment
- No loose wires or connection
- Properly plugged and fixed
- If short circuit call electrician.
- Electricity back up battery/ generator

Fire Safety

- Use fire proof material
- Have fire exit in all buildings
- Smoke detectors and water sprinklers on the roof of all floors
- Fire Extinguishers in all areas
- Fire Hydrants in all buildings
- Training in fires management

Blood Safety

- Proper grouping & cross matching
- Test of HIV, inf, Hepatitis & VDRL
- Proper leveling of group, name of the patient
- Control of mismatch reaction
- Standard operating procedure
- Screening against HIV, Hepatitis, VD, Malaria
- Inform adverse reaction to BB

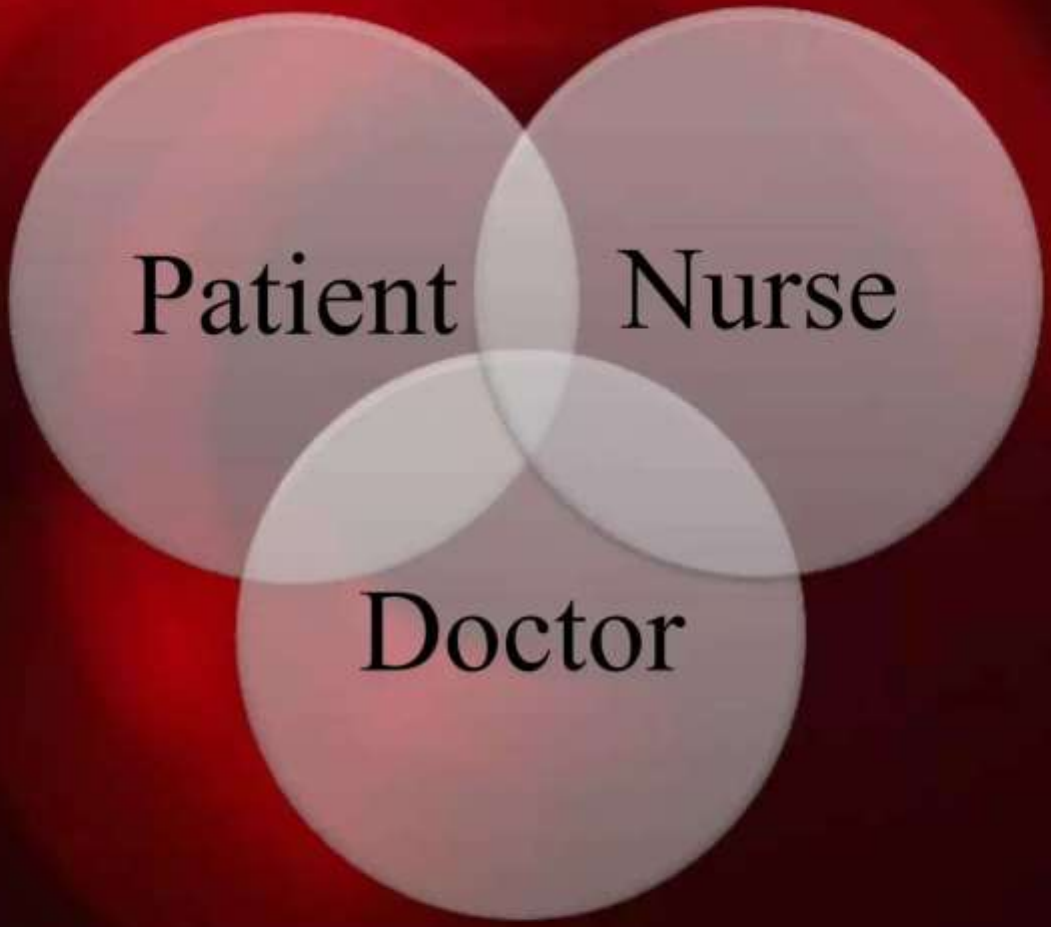
Sanitation Infection Control

- Proper segregation & transportation of biomedical wastes
- Sanitation & hygiene of different parts of hospital to avoid infection
- Use of sterile procedures
- Safety in use of incinerator, autoclave, shredder, needle, destroyers and proper disposal of biomedical waste
- Formation of hospital infection control committee
- Investigation of all hospital infections
- Use of proper antibiotic in right doses in right time
- Reorientation of Resident doctors & Nursing staff

Laboratory Safety

- Avoid needle prick & spilling of blood
- Safety measures in Radiology & Radiotherapy
- Safety norm guide lines for different areas of hospitals
- Regular pest control measures
- Care in handling acids, reagents, inflammable substances.

Who is Responsible ?



Patient Involvement

- Individual Advocacy(in doctor & hospital visits)
- Get information
- Bring an advocate
- Know what to do before leaving

Prevent medical errors by Patient

A. Medicine

- Make sure all of doctors know about every medicine patient are taking.
- Bring all of patient medicines and supplements to doctors visits.
- Make sure patient doctor knows about any allergic and adverse reactions you have and had.
- When doctors writes a prescribe make sure you can read it.
- Ask for more information about your medicines.

Prevent medical errors by Patient

- When you pick up your medicine from the pharmacy ask: is this the medicine that my doctor prescribed?
- Ask your pharmacist for the best device to measure your liquid medicine.
- Ask for side effects of your medicine.

Prevent medical errors by Patient

B. Hospital stays

- If you are in a hospital, consider asking all health care workers who will touch whether they have washed their hands.
- When you are discharging, ask your doctor to explain the treatment plan you will follow at home.

Prevent medical errors by Patient

C. Surgery

- If you are having surgery, make sure that you, your doctor, and your surgeon all agree on exactly what will be done.
- If you have choice, choose a hospital where many patient have had procedure or surgery you need.

Prevent medical errors by Patient

B. Hospital stays

- If you are in a hospital, consider asking all health care workers who will touch whether they have washed their hands.
- When you are discharging, ask your doctor to explain the treatment plan you will follow at home.

Patient Involvement

- Patient Representative in health care organization
- Patient participation/Activist.
- Patient advocate for friends and family

Top 7 barriers to implementing patient safety system

i. Competing priorities for scarce resources in a system where patient safety is not considered a top priority.
ii. Lack of resources: inadequate staffing and work overloads.
iii. Availability and cost of patient safety technology.
iv. Resistance to change (the assumption that providers are already providing safe care).
v. Culture of blame (current healthcare culture is punitive in nature).
vi. Lack of senior leadership understanding of and involvement with patient safety issues.
vii. Culture of healthcare workforce perceptions, attitudes and behaviors of error "cover up".

Sources

1. *What is patient safety? Via WHO*
2. *Why applying human factors is important for patient safety via WHO*
3. *Using quality improvement methods to improve care via WHO*
4. *Understanding and managing clinical risk via WHO*
5. *Patient safety and invasive procedure via WHO*
6. *Patient safety definition via WHO*
7. *Infection prevention and control via WHO*
8. *Improving medication safety via WHO*
9. *Fundamental of patient safety seminar via WHO*
10. *Engaging with patients and carers via WHO*
11. *Being an effective team player via WHO*

12. *http://www.who.int/patientsafety/en/*

THANK YOU