

# Planning Hospital Units



# Functions of a Hospital

- **Preventive**
  - Concerned with health promotion
  - Participated with community/peripheral health care delivery systems
- **Curative**
  - Patient care
  - Includes health education
- **Training**
  - Continuing and on the job training
- **Research**
  - Health related researches



# Categories of Hospitals



- **Based on levels of functioning:**

- Primary hospitals
- Secondary hospitals
- Tertiary hospitals

- **Based clinical specialties:**
- General hospitals
- Special hospitals

- **Based ownership:**

- Government

# Principles of Planning Hospital Units

- **Protection**
  - Protection from unwanted & unnecessary disturbances in order to help speedy recovery
- **Separation**
  - Separation of dissimilar activities
- **Control**
  - Control over the untoward incidents
- **Circulation**
  - Proper integration of departments
    - Emerson Goble



# Objectives of Planning Hospital Units

- Provide quality care
  - Quality medical services & enhancing patient satisfaction
- Provide maximum comfort
  - Comfort in terms of safety, security, convenience & privacy
  - Avoiding slippery floors, direct sunlight etc.
- Enhance staff satisfaction
  - Staff motivation & safe working environment
- Patient relatives & visitors convenience
  - Comfortable stay, safe environments etc
- Maintenance & cost of services



**Planning different hospital  
units**

# Divisions of a Hospital

- **Administration division.**
- **Outpatients' division**, includes;
  - Outpatient clinics.
  - Pharmacy.
  - Emergency reception.
- **Diagnostic services division**, includes;
  - Laboratories.
  - Radiology (diagnostic).
- **Therapeutic services division**, includes;
  - Physical Therapy.
  - Radiology (therapeutic).

# Continues...

## 5. Internal medical treatment division, includes;

- Operation Theatres.
- Intensive Care unit.
- Maternity section.
- Central Sterilization Department



## 6. Inpatient division, includes;

- Patient wards.
- Nurses wards.
- Inpatient services.





# Continues...

## 7. **General service division**, includes;

- Kitchen.
- Laundry.
- Storages.
- Workshops.
- Mechanical services.
- Mortuary.
- Security.
- Parking.
- Landscaping.



# Inpatient Unit

- **Patient rooms**

- Private/semi private or multi-bed general wards
- Safe and aesthetic
- Contain space for equipments, staffs & various needs of the patients

- **Nurse station**

- Designed to observe the patients

- **Work area**

- Space for materials necessary for patient care



# Continues...

- *Facilities & space required:*
  - Examination & treatment room with wash basin
  - Cupboard for clean linen
  - Baskets for soiled linen
  - Waste baskets
  - Equipment storage rooms (For IV stands)
  - Lockers for staff
  - Space for storing stretchers and wheel chairs
  - Staff toilets
  - Small laboratory
  - Telephone



# Specific Hospital Units

- **Outpatient unit**

- Preferably on the ground level with separate entrance and adequate parking facilities
- Should be close to admitting area, MRD, Emergency, Radiology/Lab services & Pharmacy
- Proper ventilation & wide passages
- Properly signed

- **Emergency unit**

- Should be in the ground level
- Separate entrance
- Well marked with proper lightings & signs
- Should be visible & accessible from the street
- Close to the admitting dept, MRD, Diagnostic services, Blood banks, elevators & cash counter.

- **Intensive care units**

- Preferably in the ground floor with convenient access to OT & ED
- Consists of patient area, staff area & support area

- *Basic requirements are:*

- Direct observation of the pt by the nsg & medical staffs
- Surveillance of physiological monitoring
- Provision and efficient use of routine and emergency diagnostic procedures & interventions
- Recording/Monitoring equipments

- **Obstetrical units**

- Located close to labor & delivery room & also to the nursery
- A separate room for patient education & group discussions

- **Newborn unit**

- An area of 30 sq ft/ infant
- Partitions made of clear glass (For observation)
- Furniture, cabinets, incubator, utility tables, wash basin, waste receptacles, oxygen & suction outlets

# Area requirement- Nursery

Type	Area (Sq. feet)
Septic	150
Normal	150
Premature	23
Nurses station with toilet	190
Doctors duty room	190
Formula/Breast feeding	115
Store	115
Phototherapy room	115



- **Pediatric unit**

- Equal space for beds
- Provisions for parents stay
- Separate provision for examination & Rx of infants
- Single/separate room for critically/infections
- Recreation rooms
- Storage room for toys, linen & recreational materials
- Glass panels between walls
- Lightings and cheerful colors



- **Psychiatric unit**

- Consultation area containing individual and family sessions
- Conference/therapy rooms
- Activity area/ occupational therapy unit
- Ward with 20-24 beds
- Private rooms
- Time-out rooms for violent/aggressive patients
- Secure wards/rooms
- All electrical fittings shall be suitably protected

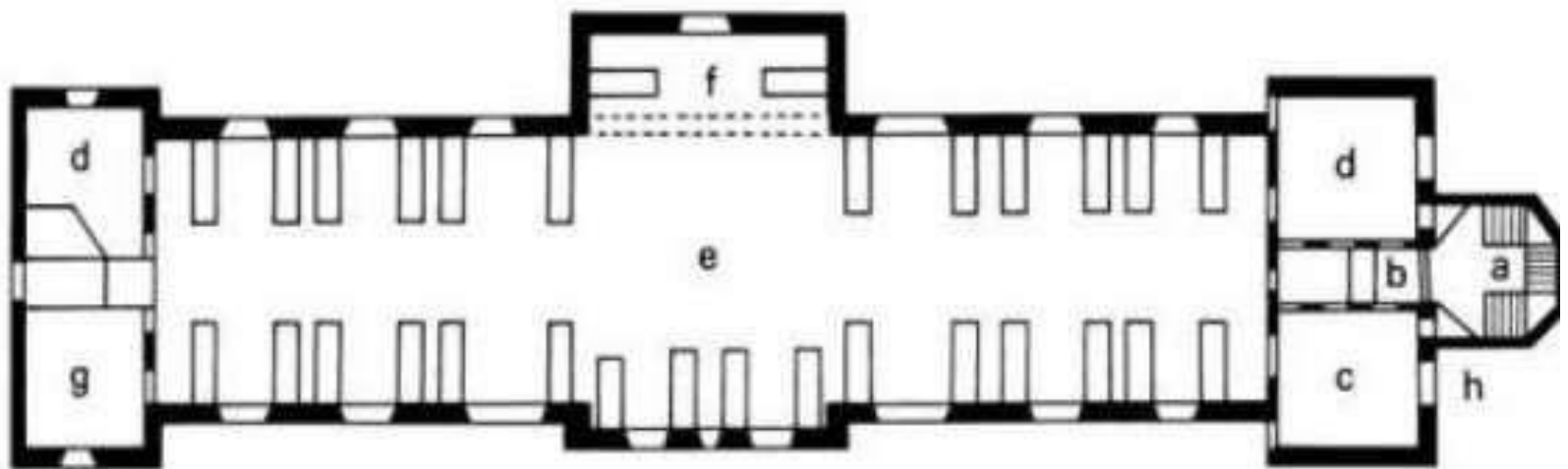
- **Radiology & laboratory services**
  - Should be easily accessible from OPD, casualty & IP
  - Preferably in the Ground floor
  - Adequate area for reception/waiting
  - Provision of separate rooms for technical functioning
- **Pharmacy**
  - Easily accessible
  - Dispense counters
  - Drugs storage spaces- cool & cold
  - Administrative offices
  - Circulation space

- **Hospital workshop department** (Bio Medical Dept)
  - It maintains & repairs the technical requirements in a hospital
- **Laundry**
  - Space for washing & keeping clothes
- **Hospital store**
  - With separate entrance
- **CSSD**
  - Located at centrally or unit wise (Maternity, childcare etc.)
- **Hospital dietary services**
  - Should be at ground level

# Designs of Patient Care Units



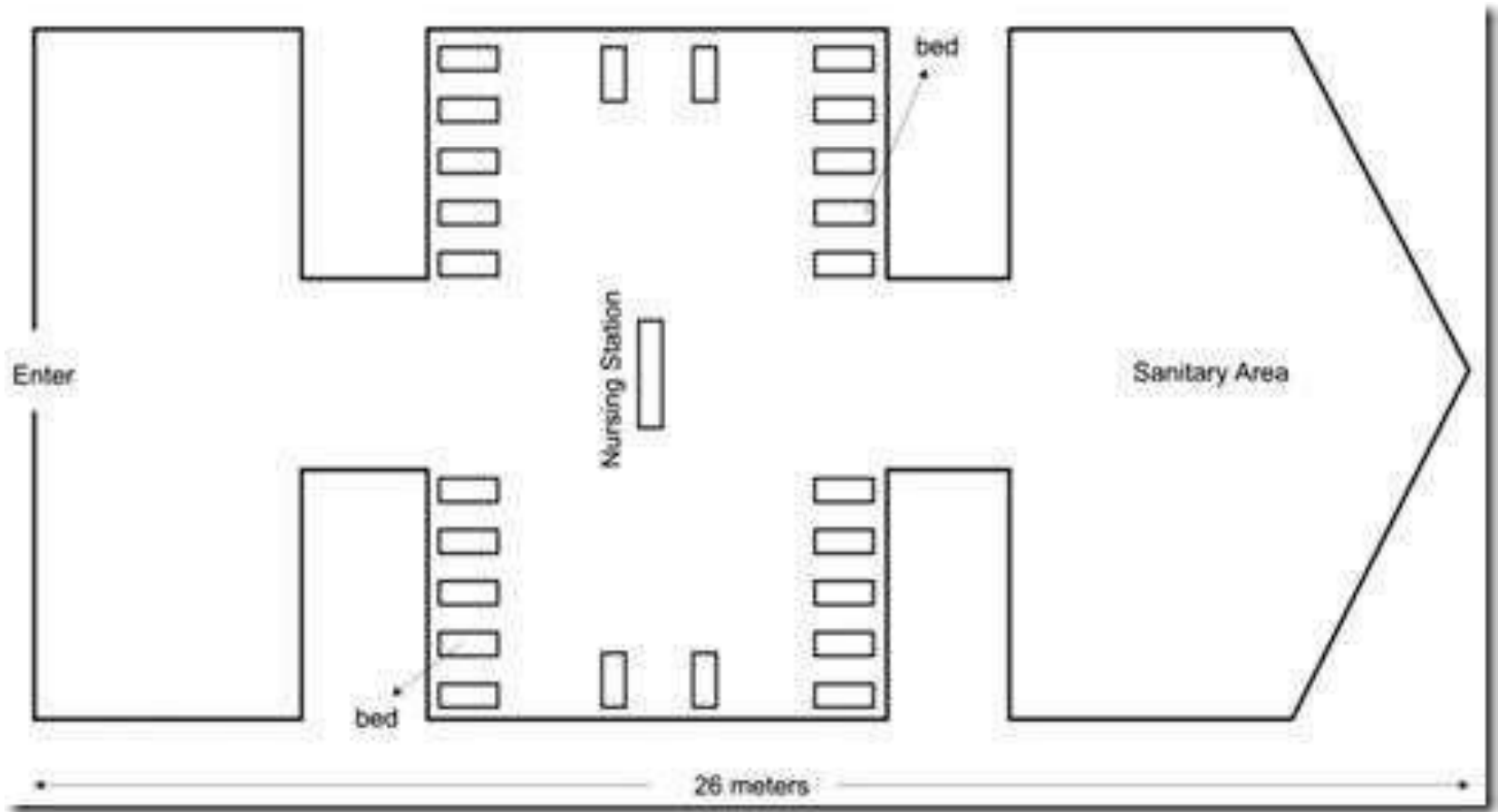
# Nightingale ward



# The Nightingale Ward

- *Advantages*
  - Excellent cross ventilation
  - Good lighting
  - Clear and unimpeded view of all patients
- *Disadvantages*
  - No privacy for the patients
  - Nurses or professionals may find difficult to move across

# Variant Nightingale Ward



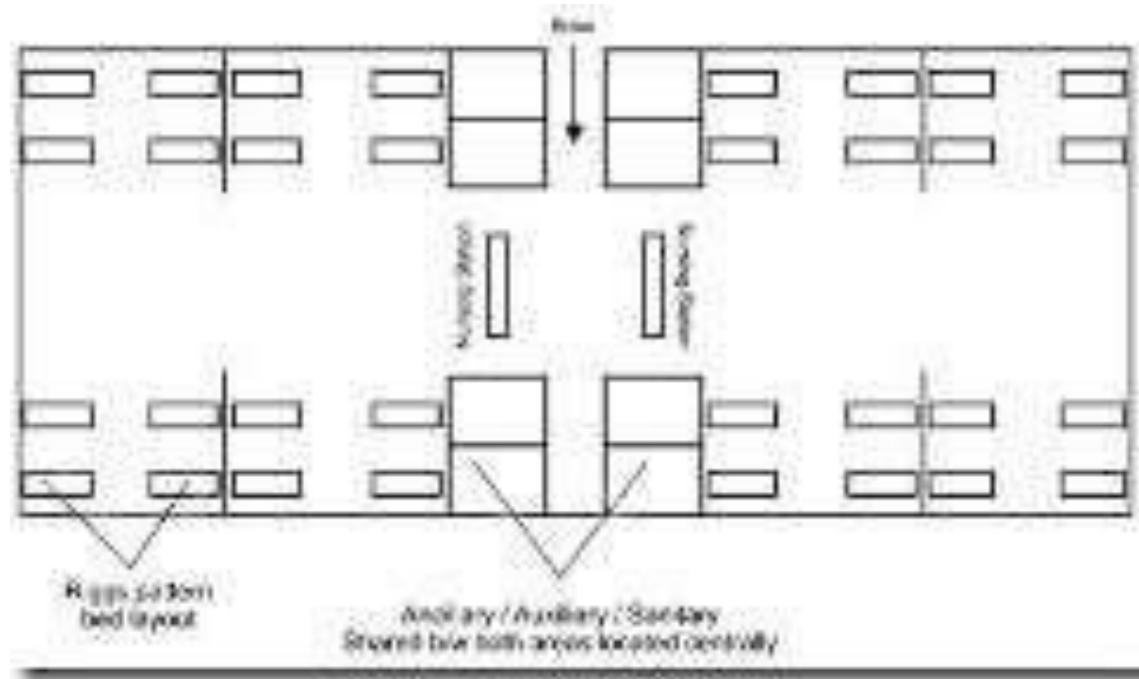


# Variant nightingale ward

- *Advantage*
  - Privacy for the patients
  - Reduction in the noise levels
  - Reduced incidence of cross infection
  - Attached toilets making it convenient for patient relatives
- *Disadvantages*
  - Reduced view from the nurses station
  - Difficulty to communicate
  - Construction cost is high
  - Maintenance is difficult

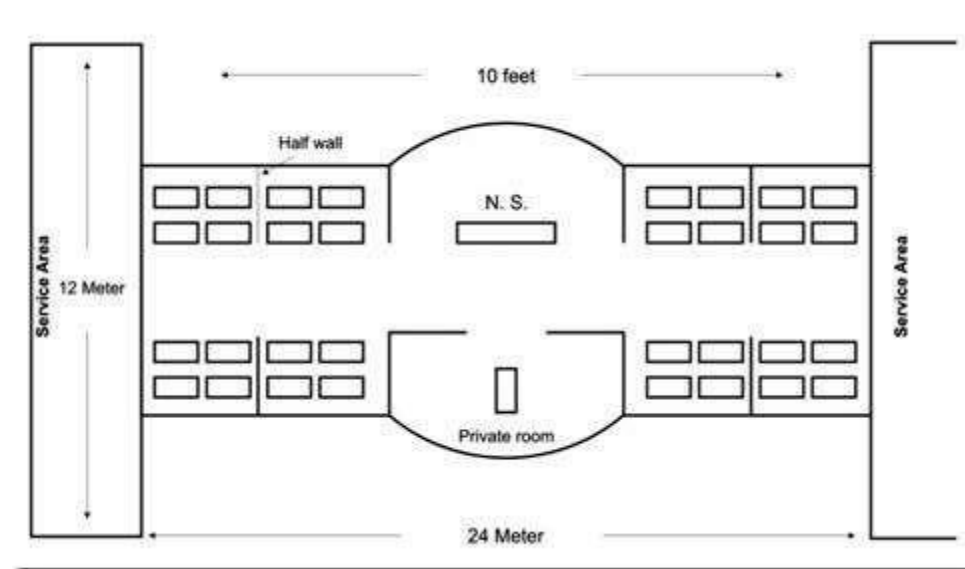
# Race track design

- Also called double corridor system

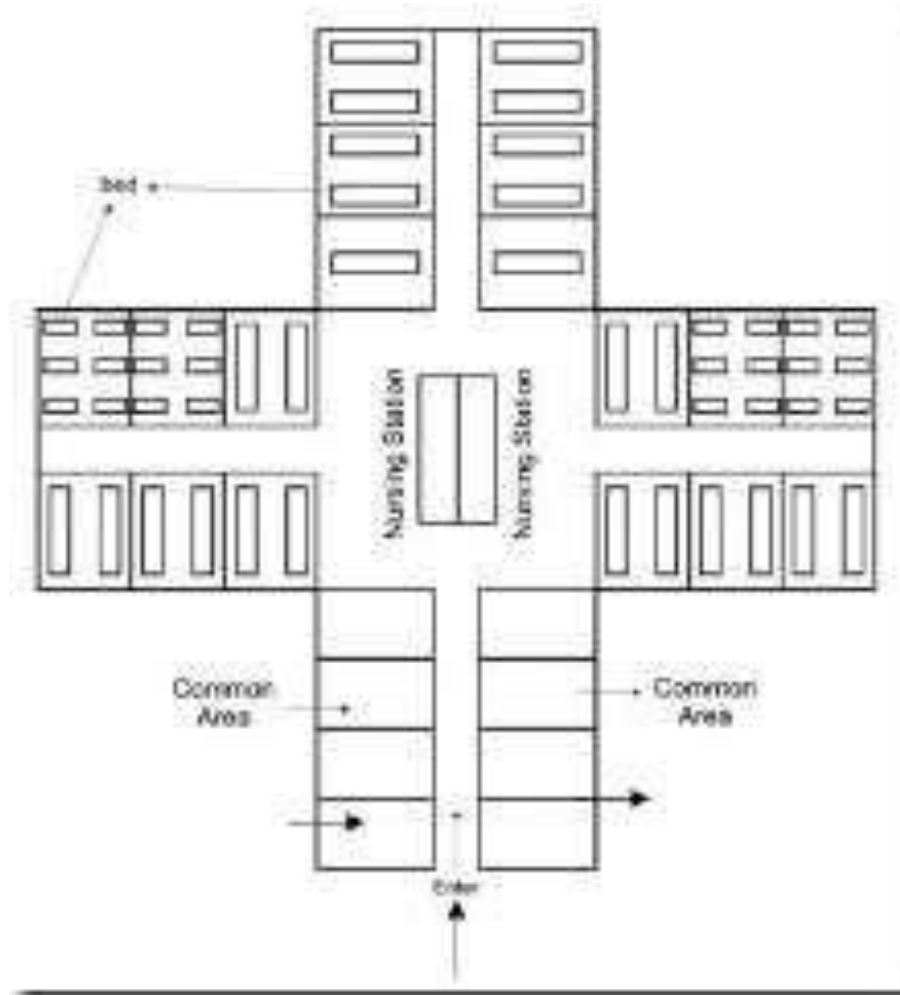


# Rig's design

- Spacing of bed is improved
- Enhanced privacy due to wall partition of 5 ft height.
- Reduced walking distance
- Patient beds are arranged parallel



# Harness type Ward



# Courtyard Ward

- Adequate natural lightings are enabled



# References

- Suneetha M. Management of nursing service and education. 1<sup>st</sup> Ed.,