# Application of genetics in nursing/ nurse's role

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# Major practical application

1-Understands genetics basis of disease- Role of different genes in causation of genetic disorders and defects ,Normal and abmormal cell devision , genes for health illness continum

- 2- Early and effective diagnosis of genetic disorder3- Contributes towards health promotion with genetic aspects
- 4- Prevention of genetic condition

5-management and care of genetic disorders6- genetic information and counselling referral services7- social and ethical issues in genetic

 Assisting patients in coverying information about genetic risk to other family members - Provide informed consent, pre and post counselling for all genetic testing.

#### What Can Genetics Nurses Do

- Obtain a detailed family history and construct a pedigree (family history diagram)
- Assess and analyze hereditary and nonhereditary disease risk factors
- Identify potential genetic conditions or genetic predisposition to disease
- Provide genetic information and psychosocial support to individuals and families
- Provide nursing care for patients and families at risk for or affected by diseases with a genetic component
- Provide genetic counseling

• Facilitate genetic testing and interpret genetic test results and laboratory reports

# PRACTICAL APPLICATION OF GENETIC IN NURSING

- delivery of genetic services and management of genetic information.
- Nurses require genetic knowledge to identify, support, refer, care for persons.

- Genetic nursing is practiced in different environment such as
- maternity,
- paediatric ,

• medical surgical nursing and community health nursing .

- Nurses In Genetics Work With Patients And Their Families In Many Settings
- specialty clinics where gene-based diagnoses and therapies are offered
- prenatal and reproductive technology centers
- cancer centers
- primary health care settings
- pediatric clinics
- industrial health
  - school health
  - research centers
- biotech and insurance industries

### ROLE OF NURSE

- Receive the client and family and make them comfortable in assessment room for genetic counselling.
- Obtain prenatal , family and other family histories from individual and family .
- Conduct a primary physical information and collect other relevant information.
- Identify families at risk , investigation the problems present in the family

#### Provide psychological support

- Provide information about hereditary pattern
- Collect other related information from individual and family .
- Provide all explanation about all the question. Obtain an informed written consent for any planned genetic test / intervention .
- Encourages the individual and family to ask question as much as they can understand about all aspects of disorders ,Testing , management.

Maintain privacy and confidentiality of all information
Ensure follow up and supportive services

#### Thank you