



'UMMID' Initiative

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Recently, the Government of India has launched **UMMID (Unique Methods of Management and Treatment of Inherited Disorders)** initiative **to tackle inherited genetic diseases of newborn babies.**

- The programme will be implemented through **government hospitals** to regularise the use of cutting edge **scientific technology and molecular medicine** to achieve Universal Health Coverage for all.
- The initiative is designed on the concept of '**Prevention is better than Cure**'.
- In India's urban areas, congenital malformations and genetic disorders are the **third most common cause of mortality after** prematurity & low birth weight issues and infections in newborns.
- A very large population and high birth rate, and consanguineous marriage favoured in many communities are some of the important reasons for the high prevalence of genetic disorders in India.
- **The UMMID initiative aims:**
 - To establish **NIDAN (National Inherited Diseases Administration) Kendras** to provide counselling, prenatal testing and diagnosis, management, and multidisciplinary care in Government Hospitals wherein the influx of patients is more.
 - To produce **skilled clinicians in Human Genetics,**
 - To undertake **screening of pregnant women and newborn babies** for inherited genetic diseases in hospitals at **aspirational districts.**
 - To create awareness about genetic disorders amongst clinicians and to establish molecular diagnostics in hospitals.

The three components of UMMID Initiative

Fellowship in Genetic Diagnostics: Hands-on training for six months will be provided to doctors working in government hospitals by eight departments with state-of-the-art DNA-based diagnostic services for genetic disorders. Each centre will train 4 fellows per year thus providing 96 trained doctors in genetic diagnostics during the period of 3 years.

NIDAN Kendras [Diagnostic Centres]: Hospitals with interested doctors, committed administrators and basic infrastructure have been selected and have been funded to establish genetic laboratories. The centres selected have medical doctors with expertise in medical genetics and passion for the specialty. The financial support and twinning with established Medical Genetics centres will help them to develop state-of-the-art facilities in molecular diagnostics.

Prevention of Genetic Disorders in Aspirational Districts: Each of the 7 centres providing genetic training have adopted one aspirational district and will establish a program for prevention of genetic disorders including beta thalassemia and newborn screening for treatable disorders. This will be a prototype of an outreach program which will take latest genetic diagnostics to the population and lead the way to incorporate genetic services in maternal & child care. This will provide onsite training to the doctors in these district hospitals in addition to creating awareness about genetic disorders amongst the general population.

UMMID initiative shall work to shift focus from **“sick-care” to “wellness”** by promoting the **prevention** of genetic diseases.

Inherited Genetic Diseases

- A genetic disorder is a disease caused in whole or in part by a change in the DNA sequence away from the normal sequence.
- Genetic disorders can be caused by a mutation in one gene (monogenic disorder), by mutations in multiple genes (multifactorial inheritance disorder), by a combination of gene mutations or by damage to chromosomes.
- Some of the examples of Genetic disorders are: Sickle Cell Anemia, Heart Disease, High Blood Pressure, Alzheimer's Disease, Diabetes, Cancer, and Obesity.

Source: PIB