Impact on Diagnosis & Patient Care

Early Risk Stratification: AI identifies high-risk pregnancies months before delivery.

Timely Intervention: Allows doctors to recommend preventive measures (e.g., progesterone therapy, cervical cerclage, specialized monitoring).

Better Resource Allocation: High-risk mothers can be referred to advanced neonatal care centers in advance.

Improved Outcomes: Reduced neonatal mortality and long-term complications like cerebral palsy and chronic lung disease.

5. Challenges & Limitations

Data Gaps: High-quality datasets from diverse populations are limited.

Bias: AI models may underperform if trained on one population but applied to another (e.g., Western datasets vs. Indian context).

Ethical Issues: Risk of anxiety and stigma if predictions are not explained properly.

Integration Barriers: Many hospitals lack interoperable EHR systems.