

# Genetic Disorders in Arabs

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## Impact of GDs in the Arab World

- Chronic in nature with lifelong management and no definitive cure
- Common GDs in Arabs reached epidemic proportions (SCD, AT, HT, DM)
- Spontaneous abortion, neonatal death, morbidity and mortality in children and adults

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## Economics of GDs in the Arab World

- Longer and more frequent hospital admissions
- Higher number of surgeries
- Total costs paid are more expensive
- Come frequently from outside major cities and travel farther to obtain better treatment
- Families end up by paying the bill
- SCD: 6300\$ required annually excluding indirect and tangible costs

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## Preventive Aspects of Genetic Disorders

- Expertise and resources to initiate prevention programs are available in the region
- Newborn and carrier screening programs
- Abnormal findings should lead to clinical management of genetic disorders
- Cost effectiveness
- Extensive educational activities
- Sensitivity to cultural backgrounds

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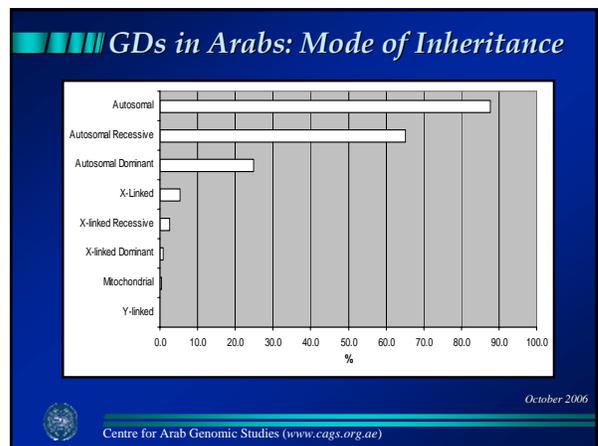
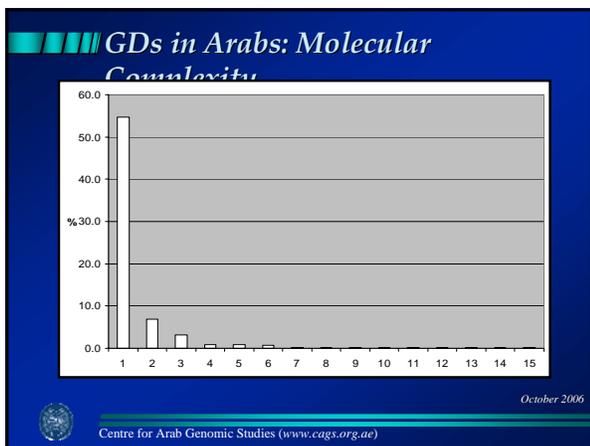
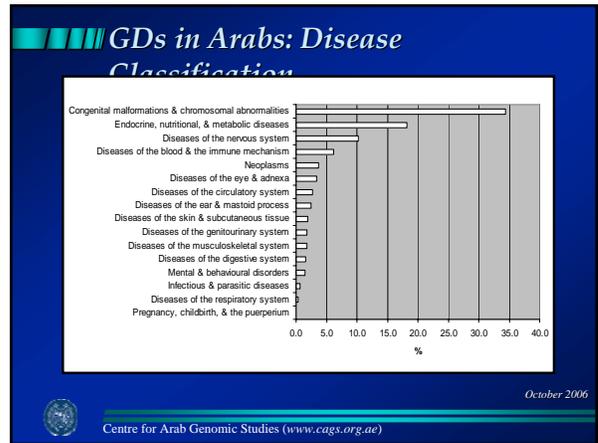
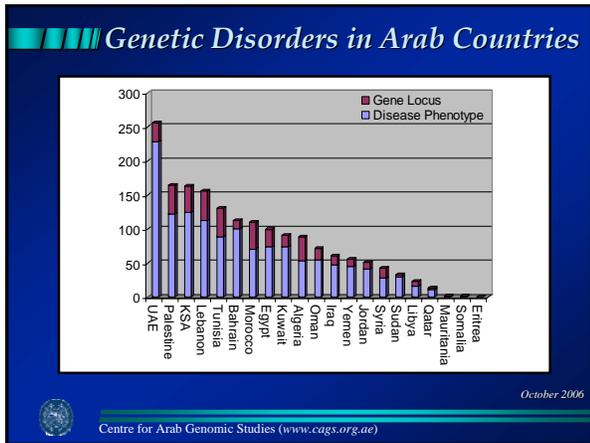
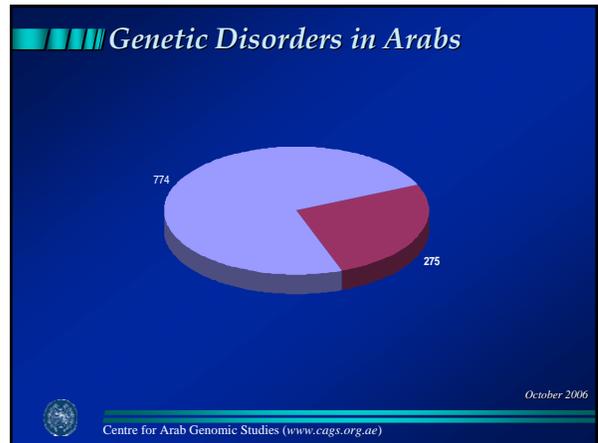
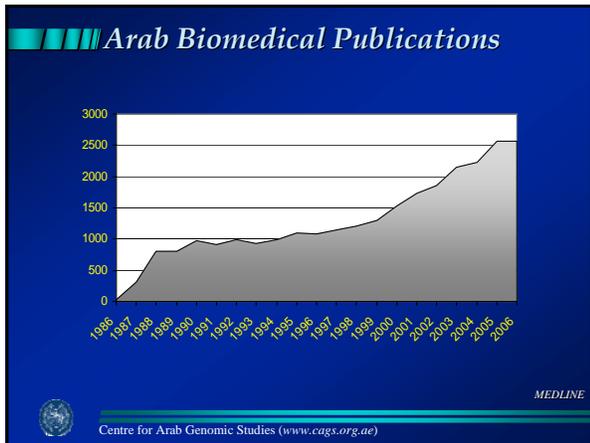
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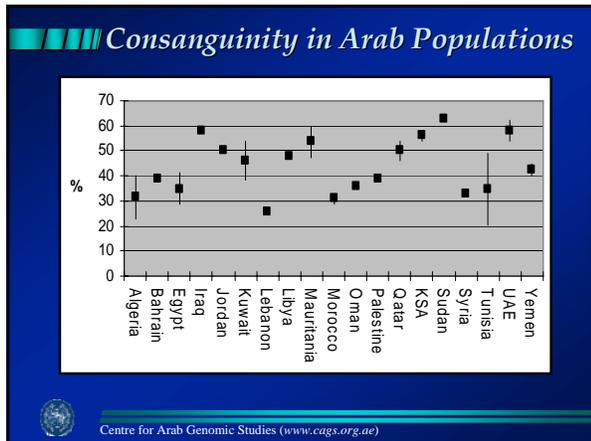
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## The CTGA Database

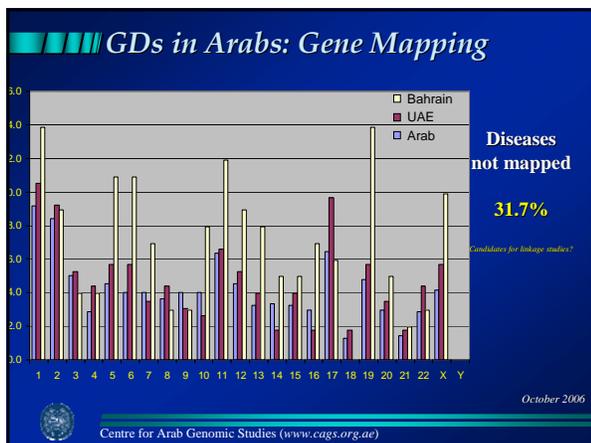
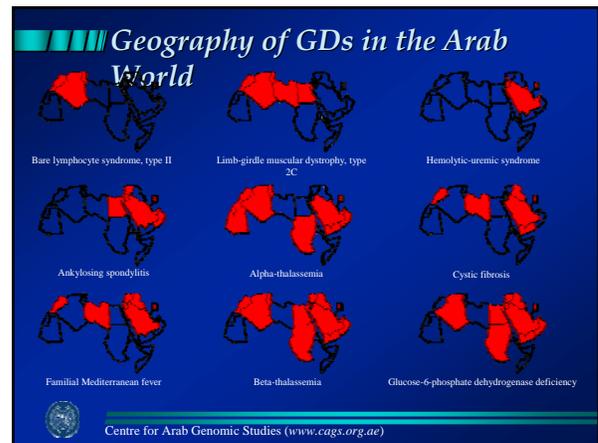
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- ### Spectrum of Genetic Disorders in Arabs
- Teebi type of Hypertelorism (1987)
  - Teebi-Shaltout syndrome (1989)
  - Al-Gazali syndrome (1994)
  - Megarbane syndrome (2001)
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- ### Spectrum of Genetic Disorders in Arabs
- Lebanese type of mannose 6-phosphate receptor recognition defect (1984)
  - Algerian type of spondylometaphyseal dysplasia (1988)
  - Kuwaiti type of cardioskeletal syndrome (1990)
  - Yemenite deaf-blind hypopigmentation syndrome (1990)
  - Nablus mask-like facial syndrome (2000)
  - Jerash type of the distal hereditary motor neuropathy (2000)
  - Karak syndrome (2003)
  - Omani type of spondyloepiphyseal dysplasia (2004).
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- ### Challenging Issues: Scientific Reporting
- Inconsistencies in reporting (patient origin, family history)
  - Occur more in international articles
  - Unified system for clinical and molecular reporting
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**Challenging Issues: Research**

*Directions*

- **Clinical reports vs. molecular studies**
- **Lack of large-scale data of DNA or protein sequences, mutations, and SNPs data**
- **Data necessary to address urgent health needs**
- **Constructive engagement of global efforts to build sustainable research activity based upon education and improvement of human**



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