Background and Objectives:
In the past 40 years Oman has witnessed remarkable social and economic growth, which is best reflected in the well-organized and efficient healthcare system. It has been anticipated that a change in disease pattern would be brought about by improvement in the quality of life, comprehensive healthcare facilities and successful control of communicable diseases. Although genetic and congenital disorders are increasingly observed in medical practice, there were no convincing available data to support these observations. The study was performed over the years 2010-2012 in order to assess the population needs for genetic services.

Methods:
A population-based study was conducted with detailed assessment and interviews of more than 3000 Omani mothers. Randomization was performed by counting the number of nationals in each geographical area and places of residence, and interviewing one mother per 600 Omani nationals in all geographic locations throughout the country. The collected data were verified with available hospital records and reports and analyzed.

Results and Conclusions
The population-based study revealed that 10% of Omani mothers reported congenital and genetic disorders causing morbidity in their offspring. Congenital disorders with mental disability accounted for over half of the reported morbidity, and a third of these reports had familiar recurrence. Morbidity and mortality from congenital and genetic causes that have been derived from this study reflect the situation in traditional Muslim community with high rate of inbreeding where communicable diseases were successfully controlled, and prevention measures are still in a preparatory phase.

The current study confirmed that congenital and genetic conditions are the major contributors to childhood morbidity and mortality, and handicap prevalence in the Sultanate of Oman, indicating the need to prioritize future healthcare and planning, in view of their significant financial, social and research relevance.