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## Genetic and environmental risk factors of congenital heart defects: Etiological perspective

**Abdullah A Alabdulgader**

Prince Sultan Cardiac Centre, Saudi Arabia

Congenital heart defects are the most common congenital anomalies in human. They constitute the leading cause of congenital anomalies related deaths in all nations and contribute to major health as well as economic and psychological burden in individuals and nations worldwide. In spite of the explosive nature of genetics and epigenetics of cardiac dysmorphogenesis there is increasing level of evidence of the significant directive role of epidemiological data. This is due to the extreme complexity of signalling and transcriptional networks involved in heart development which emphasize the critical and complementary nature of epidemiological research to get closer to the absolute facts of human heart development. We, recently, finalized case-control project of epidemiology of Congenital Heart Defects (CHD) in Saudi live born infants. The main objective of this project was to shed light on probable environmental and genetic risk factors implicated in the etiology of Congenital Heart Defects (CHD) in Saudi population. Unique national sample was created representing one of the largest risk factors database in the history. The various genetic and environmental risk factors constituting 7327\*412 information matrix. Parents were interviewed about a wide range of genetic, physiological, medical, occupational and environmental factors that occurred during the critical embryogenesis period. New insights and associations were discovered. This comprehensive database should encourage the international congenital heart community for complementary resources of knowledge in the field aimed toward historical collaboration to abort the process of cardiac dysmorphogenesis in human.

### Biography

Abdullah A Alabdulgader is the Professor of Congenital Cardiology/Electrophysiology and also General Directorate of Health. He has completed his undergraduate in King Faisal University 1991. He is the Founder and General Director in Prince Sultan Cardiac Centre, General Director of King Fahad Hospital. He has received many local and international compliments and awards. A large number of Congratulatory Letters from the Presidents of the various Universities in Saudi and local educational and academic authorities has been received by him. He has got Congratulatory Letter from the Royal Highness Prince Salman Ibn Abdulaziz and Crowned Prince of Saudi Arabia.

[kidsecho@yahoo.com](mailto:kidsecho@yahoo.com)**Notes:**