

Editorial

Genetic diseases in Arab populations

M.A.F. El-Hazmi¹

There are a great many isolated reports on a vast number of different genetic conditions in the Arab population. Of particular interest is the unique opportunity to unveil the complexities of inheritance in a rapidly increasing population with rich historical, cultural, traditional and religious commonality. The large family size, high rate of consanguinity and other forms of intermarriages make the Arab people unique from the point of view of genetic analysis.

In the industrialized countries, community surveys show that approximately 3% of all pregnancies result in the birth of a child with a significant genetic disease or birth defect which can cause mental retardation, other crippling conditions or early death. Such data are lacking in the Arabs, but considering the high rate of consanguinity and other relevant factors, it is predicted that abnormal births are more frequent in these populations. Since these diseases are chronic in nature, they impose a heavy medical, financial and emotional burden; hence the urgent need for effective control and prevention strategies.

Over the years, the Arab world has undergone a considerable transition as regards the health status of its people. Infectious diseases and nutritional disorders have decreased in prevalence because of the significant advances made in immunization, the discovery of antibiot-

ics and the overall improvement in hygiene. Thus, these earlier causes of morbidity and mortality are now being exceeded by genetic diseases, which although relatively infrequent, constitute a significant cause of chronic health problems, morbidity and mortality and hence are a major burden on health care systems.

In the past decade, studies on genetic diseases in the Arab population have gained momentum, and several new disorders specific to this population have come to light. We are now at an appropriate stage to revise and assess the available information and to learn from it. By sharing experiences, we gain information of tremendous significance, particularly in combating these conditions by devising adaptable and applicable control and prevention strategies.

With the primary aim of bringing together experts in the field of genetics in the Arab world, to provide a forum for discussion and exchange of opinion and to make readily available documented sources of information on Arab populations, the symposium entitled *Genetic Diseases in Arab Populations – a Wealth of Indicative Information* was held from 23 to 24 November 1997. We believe the input from scientists and experts in the field provided invaluable indicative information and experiences

¹Department of Medical Biochemistry and WHO Collaborating Centre for Haemoglobinopathies, Thalassaemias and Enzymopathies, College of Medicine and King Khalid Hospital, King Saud University, Riyadh, Saudi Arabia.

worthy of publication. This information will not only be of value to the scientists and experts in Arab countries, but also to scientists in the field of genetics the world over, and also to those concerned in the decision-making process.

The symposium was held in conjunction with the *First Gulf Symposium on Genetic Diseases* held from 25 to 26 November 1997, which was organized to serve as a forum for exchange of experiences and opinions on various aspects of community services in the member countries of the Gulf Cooperation Council. The main aims were to enrich knowledge, develop manpower and formulate a framework and plan of action for the prevention of genetic disorders and the care of those affected by them. Contributions from outside the Arab domain were welcomed so as to widen the spectrum of the symposium and to provide the participants with an update on the global progress in the field.

This special issue of the *Eastern Mediterranean health journal* includes some of the work presented during these symposia on genetic diseases as complete manu-

scripts. Other topics presented for which the complete work was not available are included in the form of abstracts. In addition, a list of contributors to both activities is included to serve as a database of the expertise available in the Arab populations.

I am greatly indebted to all the contributors to the symposia and those involved in the publication of the proceedings. My special thanks go to King Abdulaziz City for Science and Technology, Riyadh, King Saud University, Sultan bin Abdulaziz Al-Saud Charity Foundation, Prince Salman Centre for Disability Research and the World Health Organization for the tremendous support provided in various ways, without which the symposia and this publication would not have been possible. I am also deeply grateful to the Editors of the *Eastern Mediterranean health journal* who kindly agreed to publish the proceedings as a special supplement in order to permit a wider distribution and circulation.

Finally, I do hope that all readers of this special issue of EMHJ will find it most useful in their studies, research and other endeavours.