



Community Genetic Services in Iran at a Glance

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Dear Editor-in-Chief

The World Health Organization defines congenital disorders as "structural or functional abnormalities which are present from birth, whether recognized at birth or later" (1). Data on the rate of congenital disorders in Iran is sparse. Insufficient birth defects registration or surveillance system of fetuses and infants lead to scarce comprehensive data about the prevalence of congenital disorders in this country (2). The result of a cross-sectional study about the mortality causes of children with age under five yr in Iran showed that the congenital and chromosomal abnormalities were the first rank causes of their death (3).

Community genetic services (CGS) could prevent, diagnose, and care of congenital disorders and genetic diseases, and its functional arena is a community. The ability is performed through three levels of prevention including primary, secondary, and tertiary (4). Preconception care is the major part of primary prevention implemented since a decade ago in public and private health centers in Iran. Preconception counseling and care provide folic acid supplementation, iron deficiency treatment, nutritional recommendations, minimization of exposure to alcohol, tobacco products, and drugs, control of chronic disease, vaccination, review of obstetric and gynecological history, and management of hereditary disease (5).

A component of CGS in secondary prevention level in Iran includes routinely screening of me-

tabolic disorder like phenylketonuria, Glucose-6-phosphate dehydrogenase deficiency, galactosemia and congenital hypothyroidism during 3-5 d after births of all newborns (6). Another part of CGS in early diagnosis has been performed in the country by fetal disorders screening for Down syndrome and some aneuploidies, neural tube defect, thalassemia and congenital anomalies during pregnancy (5). The screening for neural tube defects and chromosomal abnormalities are not compulsory component of prenatal care program in Iran but counseling with all pregnant women is performed and these screening tests are recommended (7).

Rehabilitation programs for learning disabilities, cognitive impairment, and musculoskeletal defects are the main parts of CGS in tertiary prevention levels in the country. There are three rehabilitation approaches including "institution-based rehabilitation services", "outreach rehabilitation services", and "Community-based rehabilitation" (CBR) in Iran. The latest one as a national program has provided its services since 1990 within the primary health care (8). Costs and health insurance are two important factors that limit the use of CGS in Iran.

Due to the high cost of CGS, many people cannot utilize despite their availability (5). Additionally, low insurance coverage for some services within three levels of prevention in CGS could be a serious impediment to people's access (9). Be-

sides, "genetic literacy" level among public is an important factor contributing to the success of CGS (4). Despite doing prenatal visits, the overall knowledge of Iranian pregnant women regarding congenital anomalies was at a moderate level (10). Public awareness increase through planning community educational programs about congenital disorders, and sufficient insurance coverage to CGS could decrease the current impediments that are limiting the access to CGS in Iran.

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