

# Type 2 diabetes in the Kingdom of Saudi Arabia: Its prevalence and the promise of community based intervention



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### Abstract

**Background:** Diabetes Mellitus (DM) is one of the fastest-growing health problems of the developed world. It is now reaching epidemic proportions in countries like Kingdom of Saudi Arabia (KSA) due to affluent life-style, lack of exercise, unhealthy diet and obesity. Recently, major socio-economic changes have occurred in the country and prosperity has facilitated affluent lifestyles With an estimated 24% of diabetics in the population, Saudi Arabia (KSA) is among the top ten countries of the world with highest diabetes prevalence.

Aim of the study: This study aimed to determine the current burden of diabetes in the residing population of Saudi Arabia and its correlation with age, financial status and job descriptions.

**Methods:** A community-based multi-centric epidemiological study was conducted among residents - 30–70-years –old-of selected strata over a 3 -year period (2015 to 2018) in major cities of each province of KSA including cities like Riyadh, Jeddah, Damman, Mecca, Jazan etc. Self-reported data were obtained from latest known plasma glucose levels, body weight, temporal history of disease and socio-demographic status through an electronic survey to classify individuals as diabetic, pre-diabetic or non-diabetic. Data were analysed using basic descriptive statistics.

**Results:** A total of 991 subjects participated (97% response rate) out of which 667 (67.3%) were diagnosed to have DM. Diabetes mellitus was more prevalent among urban population with male preponderance. The age of 42 and a weight of 75 Kg or above in both genders was a red flag and most respondents noted to have discovered their diabetic status at this stage. Obesity, White collar jobs, multipara women who mostly stayed at home, high salary bracket families of 5000 US dollars PM or above were at the top of the diabetic list.

**Discussion and Conclusion:** Diabetes imposes a major health burden on individuals and financial drain on national healthcare systems. In Saudi Arabia, the logistic burden because of diabetes is likely to exceed \$0.87 billion owing to first-rate health insurance policies. Note that this study omits the indirect costs associated with diabetes, such as absenteeism, loss of productivity from disease-related complications, unemployment due to disability, early mortality /morbidity, community burden such as personal pain and suffering, toll on care givers etc. We need to spread awareness not only of the health aspects and related complications of diabetes, but also the socioeconomic root of this condition. A deeper understanding of the social aspects of the disease will eventually help in reducing burden at the community level in the Arab World and the Middle East. An annual screening for metabolic syndrome for all over the age of 25 years, direct referral to adequate and accessible care, nutritional labelling of all food products and social gathering events for group activities like walking, biking etc., must be adopted as an essential social trend. Such community-based approach in the long run will help to reduce the national burden of this disease.

### Biography

Tabinda Hasan, MBBS, MD, PHD (anatomy), PGDHE (higher education, Harvard university) MRCS (surgery, RCSI-Ireland) is working as Assistant Professor of Anatomy and cell biology. She is a Chair MSK block medicine, Princess Nourah Bint Abdul Rahman University, Riyadh, Kingdom of Saudi Arabia.

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