Health Expenditure on Diabetes in the Middle East and North Africa Region in 2017

BACKGROUND

Diabetes imposes a huge economic burden on healthcare systems. Since its third edition (2006)1, the International Diabetes Federation (IDF) Diabetes Atlas estimates the healthcare expenditures related to diabetes globally, regionally, and at national level.

AIM

The aim of this study was to estimate the financial burden of diabetes in the Middle East and North Africa region in 2017.

METHODS

Health care expenditures due to diabetes for the region were calculated as a sum of the expenditures from 21 countries and territories, which was estimated using an attributional fraction model, taking into consideration the differences in healthcare provision and resource utilisation between gender and age groups. Data needed for the model were obtained from: 2015 estimates of population by age and sex from the United Nations World Population Prospects, 2017 diabetes prevalence estimates from the IDF Diabetes Atlas Update, 2015 health expenditure estimates from the World Health Organization, and expenditure ratios between people with and without diabetes from US Kaiser health insurance claims data. WHO’s expenditures estimates from 2015 were adjusted to 2017 based on a growth rate, and are expressed in US dollars (USD), and in international dollars (ID). The ID is a hypothetical currency with the same purchasing power parity of USD in the United States of America at a given point in time, and is used to make comparisons both between regions and over time.

RESULTS

In total the health expenditure on diabetes reached 20.5 billion USD (ID 49 billion) in the MENA region in 2017. By 2045, the total expenditure on diabetes is estimated to reach USD 37.1 billion (ID 87.2 billion) (Figure 1).

Figure 1: Total Healthcare Expenditure on Diabetes in the MENA region, for 2017 and 2045, in billion USD and billion ID

The largest expenditures were observed in Saudi Arabia with ID 13.1 billion, Iran ID 8.6 billion and Egypt ID 7.9 billion (Figure 2 & 3). The smallest expenditure was found in Armenia with 6.09 billion. The highest mean expenditure per person with diabetes were in Qatar, and Saudi Arabia with ID 6,602 and ID 5,186 (Figure 3).

Figure 2: Top ten Countries of total Healthcare Expenditure on Diabetes on the MENA Region 2017 and 2045

DISCUSSION

The 2015 estimates on the total health expenditures on diabetes confirm the large economic impact caused by diabetes on health systems. Diabetes was responsible for 15% of the total amount spent on healthcare in the MENA region (Figure 5). Efforts on optimizing diabetes primary and secondary prevention must be conducted through cost-saving interventions on individual and population level in order to reduce this cost for societies.

REFERENCES


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