

Physical Activity

- 6) Physical in-activity is recognized as a major risk factor for CHD.
- Physical activity decreases body weight blood pressure and improves insulin sensitivity .
- The greatest benefits appear to occur with very moderate level of activity.

7) Alcohol consumption:

- Moderate to heavy increases blood pressure levels and CHD mortality , however , light regular drinking has been associated with modest reduction of CHD risk through increasing HDL.

- 8) Psychological factors and stress :
especially type A behavior pattern
characterized by excessive competitiveness,
hostility , impatience, fast speech and quick
motor movements have been studied along
with anger, job stress, anxiety and social
support.

- 9) Risk factors for CHD tend to work in cluster than individual the patient likely to have more than one risk factor.
- CHD increases markedly when risk factors manifest simultaneously there is an additive contribution to CHD risk factors .

Heart Disease Leading Cause of Death in Jordan

- Heart disease has become a leading threat to the health of the Jordanian population, with 41.5 percent of deaths last year found to be related with heart ailments .

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- "This number is much higher than 10 years ago," The prevalence of cardiovascular disease in Jordan is mostly due to:
 - 1- diet
 - 2- smoking
 - 3- pollution
- according to Bassam Hijjawi, director of the ministry's disease control department.

- He also tied the prevalence of the chronic disease to a lack of exercise, noting that over 60 percent of Jordanians suffering from heart conditions do not participate in physical exercises.

- In Jordan, the average life expectancy in 2012 was 73 years, and chronic diseases are becoming increasingly prevalent. Because personal behavior can influence the occurrence and progression of many chronic diseases.

- the Jordan Ministry of Health (JMOH) established surveillance for behavioral risk factors, particularly those related to cardiovascular diseases and diabetes.
- This report summarizes the key findings of the 2002 Behavioral Risk Factor Survey, the first reporting segment in Jordan's surveillance program for chronic diseases.

- The findings indicate that:
- **A- Smoking**
- **B- Physical inactivity**
- **C- Obesity**

contribute substantially to the burden of chronic disease in Jordan and underscores the need for effective public health interventions.

- **Reported by:** *F Shehab, MD, Field Epidemiology Training Program; A Belbeisi, MD, Jordan Ministry of Health. H Walke, MD, Div of International Health, Epidemiology Program Office, CDC.*

What is diabetes?

- Diabetes mellitus is a group of diseases characterized by high levels of blood glucose resulting from defects in insulin production, insulin action, or both. Diabetes can be associated with serious complications and premature death, but people with diabetes can take steps to control the disease and lower the risk of complications.

Types of diabetes

- **Type 1 diabetes** was previously called insulin-dependent diabetes mellitus (IDDM) or juvenile-onset diabetes.(5-10%).
- **Type 2 diabetes** was previously called non-insulin-dependent diabetes mellitus (NIDDM) or adult-onset diabetes. Type 2 diabetes may account for about 90 percent to 95 percent of all diagnosed cases.

- .
- **Gestational diabetes** After pregnancy, 5 percent to 10 percent of women with gestational diabetes are found to have type 2 diabetes. Women who have had gestational diabetes have a 20 percent to 50 percent chance of developing diabetes in the next 5-10 years.

- **Other specific types** of diabetes result from specific genetic conditions (such as maturity-onset diabetes of youth), surgery, drugs, malnutrition, infections, and other illnesses. Such types of diabetes may account for 1 percent to 5 percent of all diagnosed cases of diabetes.

Prevention or Delay of Diabetes

- Research studies have found that lifestyle changes can prevent or delay the onset of type 2 diabetes among high-risk adults. These studies included people with IGT and other high-risk characteristics for developing diabetes.

- Lifestyle interventions included diet and moderate-intensity physical activity (such as walking for 2 1/2 hours each week). In the Diabetes Prevention Program, a large prevention study of people at high risk for diabetes, the development of diabetes was reduced 58 percent over 3 years.

Diabetes in Arab World

- Diabetes prevalence rates in the Arab World, although dissimilar in different investigations, **are** nevertheless all high.
- Urban residency
- personal incomes and
- economic growth are interrelated, and, in
- connection with affluent food and sedentary
- life-style, are associated with diabetes and obesity rates.

- All Arab countries have experienced various grades of economic growth and urbanisation. However, none of these factors **are** sufficient to explain the increased rates.
- Diabetes 4th cause of death in Jordan and 7th cause of death world wide.

Complications of Diabetes

- **Heart disease and stroke**
- Heart disease is the leading cause of diabetes-related deaths. Adults with diabetes have heart disease death rates about two to four times higher than adults without diabetes.
- The risk for stroke is two to four times higher among people with diabetes.
- About 65 percent of deaths among people with diabetes are due to heart disease and stroke.

- **High blood pressure**

- About 73 percent of adults with diabetes have blood pressure greater than or equal to 130/80 mm Hg or use prescription medications for hypertension.

- **Blindness**

- Diabetes is the leading cause of new cases of blindness among adults aged 20-74 years.
- Diabetic retinopathy causes 12,000 to 24,000 new cases of blindness each year.

Kidney disease

- Diabetes is the leading cause of end-stage renal disease, accounting for 44 percent of new cases.
- In 2001, 42,813 people with diabetes began treatment for end-stage renal disease.
- In 2001, a total of 142,963 people with end-stage renal disease due to diabetes were living on chronic dialysis or with a kidney transplant.

Nervous system disease

- About 60 percent to 70 percent of people with diabetes have mild to severe forms of nervous system damage. The results of such damage include impaired sensation or pain in the feet or hands, slowed digestion of food in the stomach, carpal tunnel syndrome, and other nerve problems.

Amputations

- More than 60 percent of nontraumatic lower-limb amputations occur among people with diabetes.

- **Dental disease**

- Periodontal (gum) disease is more common among people with diabetes. Among young adults, those with diabetes have about twice the risk of those without diabetes.
- Almost one-third of people with diabetes have severe periodontal diseases with loss of attachment of the gums to the teeth measuring 5 millimeters or more.

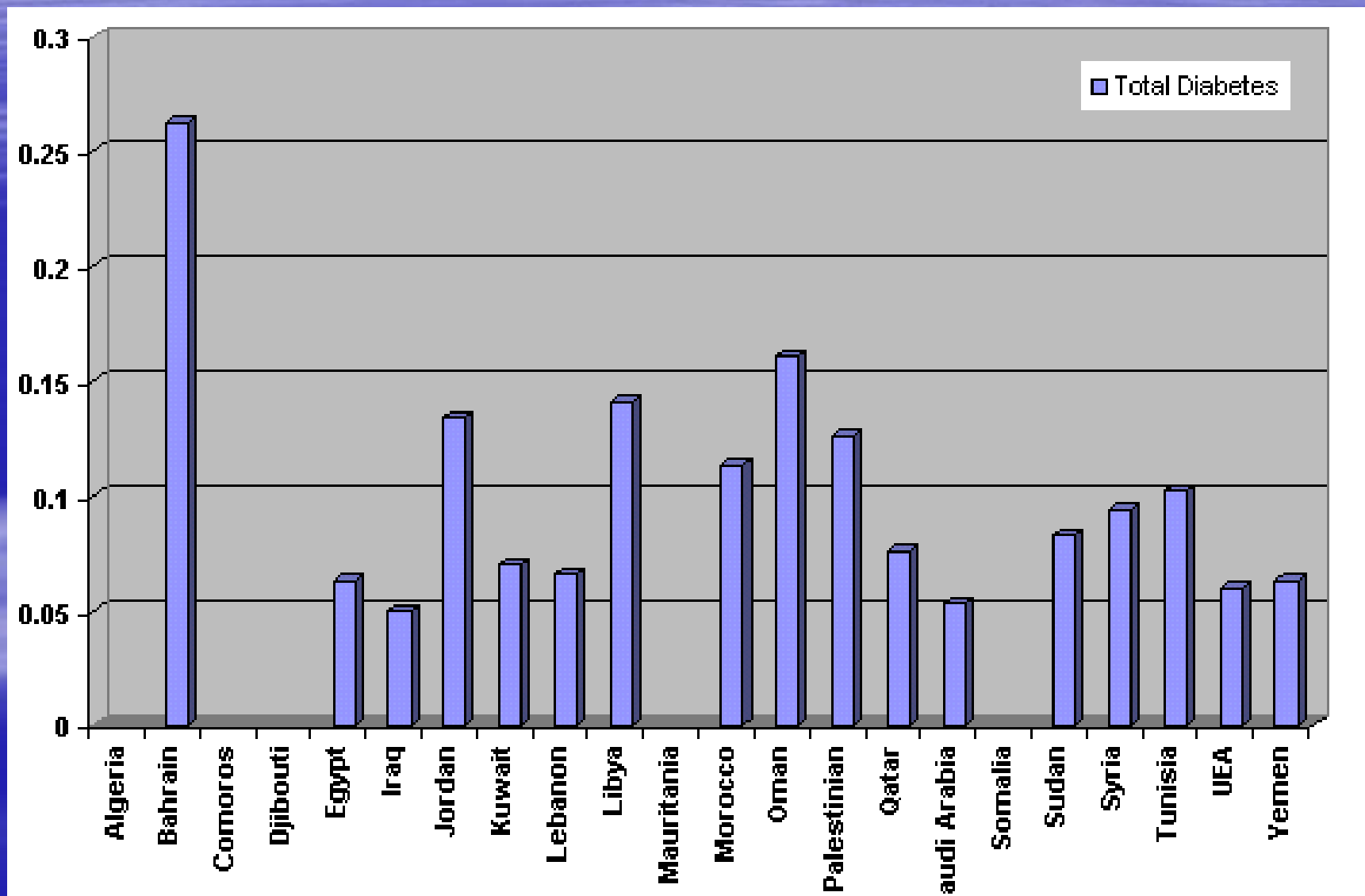
Complications of pregnancy

- Poorly controlled diabetes before conception and during the first trimester of pregnancy can cause major birth defects in 5 percent to 10 percent of pregnancies and spontaneous abortions in 15 percent to 20 percent of pregnancies.
- Poorly controlled diabetes during the second and third trimesters of pregnancy can result in excessively large babies, posing a risk to the mother and the child.

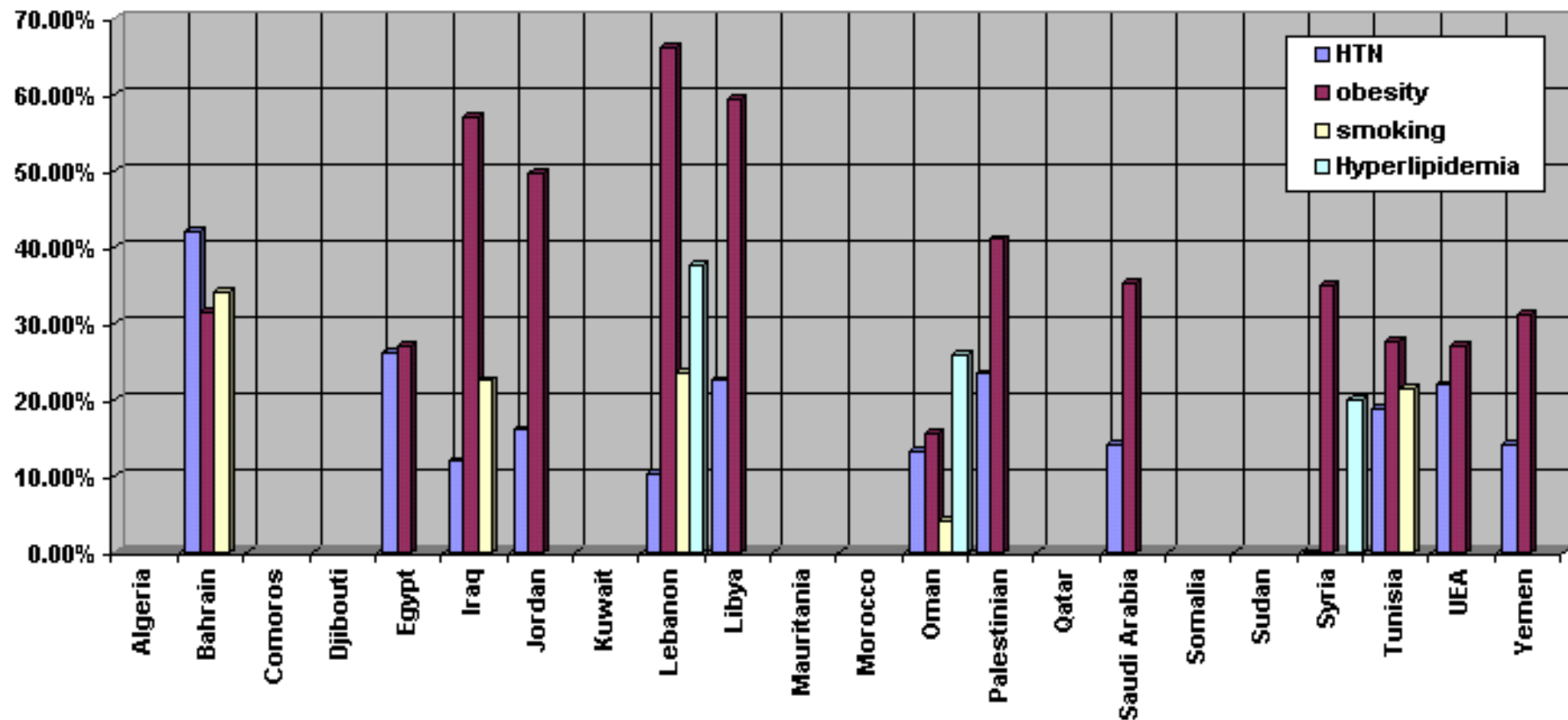
Other complications

- Uncontrolled diabetes often leads to biochemical imbalances that can cause acute life-threatening events, such as diabetic ketoacidosis and hyperosmolar (nonketotic) coma.
- People with diabetes are more susceptible to many other illnesses and, once they acquire these illnesses, often have worse prognoses. For example, they are more likely to die with pneumonia or influenza than people who do not have diabetes.

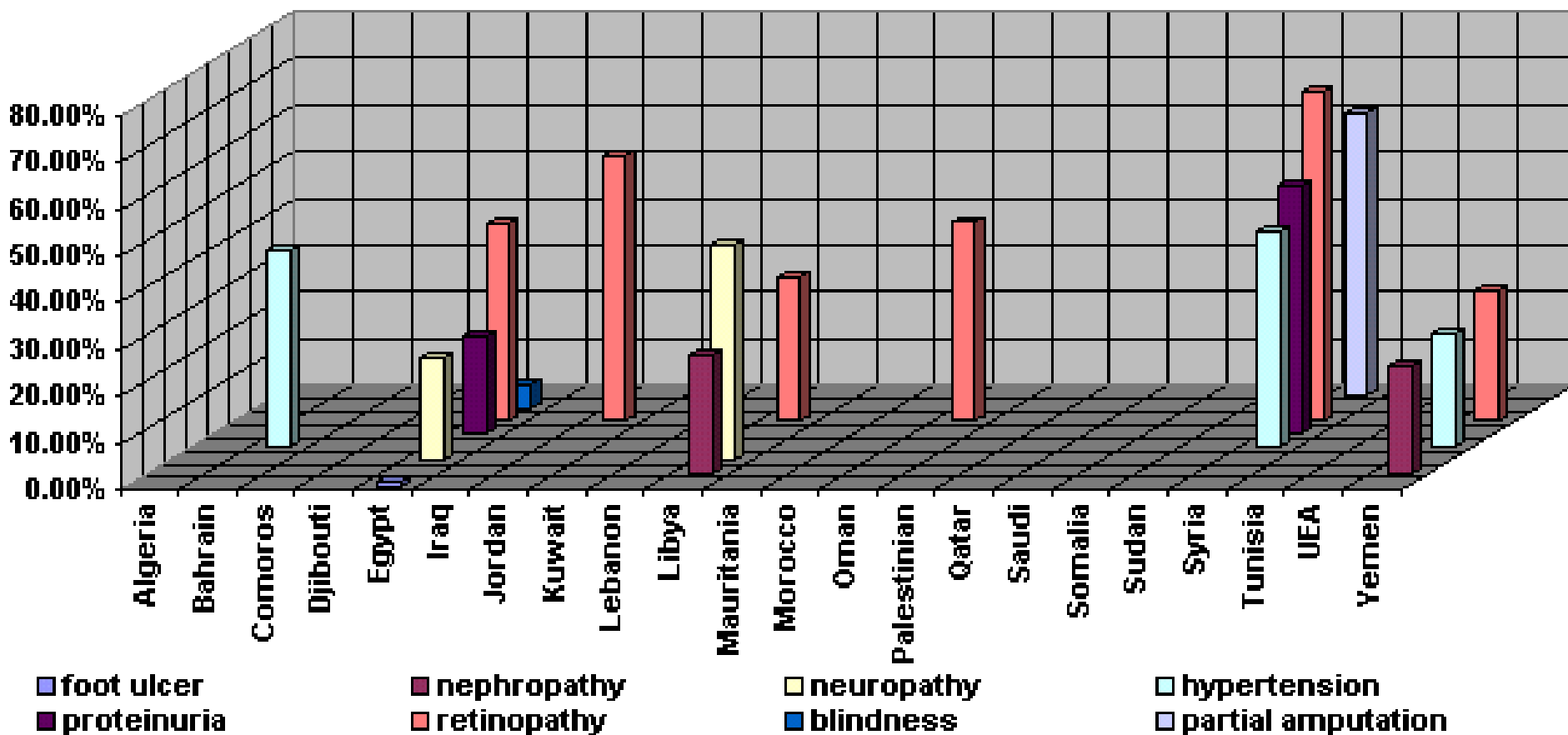
Prevalence of diabetes in Arab World



Diabetes Risk Factors



Diabetes Complications



Chronic Diseases 2

- Disability or chronicity may be the outcome of many of these chronic diseases and they will not be accounted for by using the mortality indicators as the only indicators for these chronic and degenerative diseases is the resulting disabilities rates

Examples :

- **1- Musculo-skeletal problems**
- Osteoporosis
- Arthritis and osteoarthritis which may reach in old age a prevalence of 600/1000 persons, and over 300/1000 persons in males.
- Rheumatoid arthritis
- Low back pain
- Foot problems in old age
- Scoliosis in children
- Congenital hip dislocation

2- Neurological disorders

- Cerebral palsy
- Mental retardation
- Epilepsy and other seizure disorders
- Headache and migraine
- Multiple sclerosis
- Alzheimer and dementia
- Parkinson disease.

Psychiatric Disorders

- Psychosis
 - Schizophrenia
 - 6--Affective psychosis
 - 4--Unspecified psychosis
 - 3--Senile & pre-senile dementia
- 3--Psychosis associated with other cerebral conditions¹



Neuroses.

- Phobias
- Anxiety
- Depression
- Obsessive Compulsive Neuroses.
- Personality disorders & other non-psychotic mental disorders

6- Genetic disorders

- – Down's syndrome
- Autosomal recessive defect chromosome 7 mutations are thought to be responsible for that disease .
- Cystic fibrosis : is the most lethal in Northern European descent (1/3500 births) in USA(1/14,000 births in Blacks) in Asian Americans 1/25,500 births , Median survival age for C.F. improved between 1938 and 1998 from 5 y to almost 30 y .

THANK YOU

ثم بحمد الله

