Global surveys reveal continued worsening of type 2 diabetes in developing countries. In the Middle East, there is an escalation in the prevalence of diabetes, with parallel increases in obesity and the metabolic syndrome. The Middle East is expected to have the highest increases in type 2 diabetes prevalence by the year 2030, as compared to other regions of the world. Parallel to that, there will be significant worsening of cardiovascular mortality and morbidity, with concomitant health, economic and psychosocial implications.

There are complex genetic factors connected to the increasing prevalence of type 2 diabetes. So far, more than 40 genetic loci have been associated with the increased likelihood of type 2 diabetes.

Genetic factors alone, however, could not explain the escalating epidemic of type 2 diabetes in our region. The same genetic factors have been present in the population for ages. They need long periods of time to evolve. It is the adverse lifestyles of eating habits and limited physical activities that rendered our susceptible societies to be prone to the dilemmas of diabetes and obesity.

In addition to the health consequences of the epidemics, the socio-economic burdens are escalating. In developing countries, including Jordan, that lacks a comprehensive health care system, availability of uniform documentation of medical details, especially the cost of treatment, is limited. There are only a few studies on the cost of diabetes care. Diabetic subjects spend a large percentage of income on diabetes management. The economic burden in developing countries is rising and will probably double every decade.

In the USA, the National Center for Health Statistics (NCHS) conducted a nationwide survey that included 242,383 adults as part of an ongoing survey of health status, health care access and behaviors. The CVD mortality rate associated with diabetes decreased by 60% from 1997 to 2006. This decline in the CVD mortality of diabetics was also encountered in several western European countries. Physical activity or exercise predicts improvements in cardiovascular risk factors in subjects with type 2 diabetes, independent of weight loss.

In Jordan and similarly in other Middle Eastern and North African countries, around 30% of the people, aged over 25 years, have overt diabetes or pre-diabetes, with high consequences from the health and socioeconomic aspects. Other community studies in Jordan included a prevalence of obesity/overweight, smoking and physical inactivity. Outcomes of all these studies were indicative of increased risks for cardiovascular diseases that affect younger age groups as compared to Western countries.

One problem in low- and middle-income societies is that the diagnosis of risk factors is usually late, and when medical management is started, it is often suboptimal. The consequences of these observations are massive increases in cardiovascular morbidity and mortality, together with a marked increased cost of individuals and
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Diabetes has been associated with an average 10 years of life lost for individuals diagnosed during middle age. These serious trends, if not met with proper and swift interventions, will intensify year after year.

The irony is that all these risk factors of diabetes and cardiovascular mortality-morbidity can be modified by education and lifestyle interventions. Strong leadership in public health is needed to adopt sound preventive strategies.

One example of such leadership has been adopted in the United States: The 2010 Dietary Guidelines for Americans, the federal government’s evidence-based nutritional guidance to promote health through improved nutrition and physical activity. The guidelines, released in February 2011, emphasize professional as well as public education to enhance healthy dietary choices and healthy lifestyles.

Following are some tips provided to help consumers translate the Dietary Guidelines into their everyday lives:

- Enjoy your food, but eat less.
- Avoid oversized portions.
- Make half your plate composed of fruits and vegetables.
- Switch to fat-free or low-fat (1%) milk.
- Compare sodium in food, like soup, bread, and frozen meals, and choose the foods with lower numbers.
- Drink water instead of sugary drinks.

All concerned, including medical professionals, health authorities, community non-governmental organizations and the media, should work diligently to decrease the burdens of diabetes and cardiovascular risk factors, which are all modifiable. Community-wide efforts need to be directed towards increasing physical activity and changing dietary habits as follows:

- The safety of streets and playgrounds should be increased; resources for that must be provided to encourage walking.
- Nutritional education should be provided on an individual and national level.
- Physical activity for all citizens should be increased through schools, community organizations and places of worship.
- Enhancement of physical education should be a priority of the school systems.
- Schools meal programs should be monitored to provide healthy choices for students.
- Vending machines in schools should not provide high-caloric beverages and snacks.

In our Arab and Muslim societies, there is a wealth of religious heritage related to food and physical fitness. The World Health Organization (WHO) – Eastern Mediterranean Region adopted Islamic guidance in a 1995 publication, titled Amman Declaration for Health Promotion by Following Islamic Lifestyle, which became a significant reference in this regards.

Islamic Guidance in Food, Health and Fitness

In the Glorious Qur’an and Sunnah of the Prophet (PBUH) as well as other Islamic heritage, there is a wealth of guidance related to healthy lifestyle, eating habits and physical fitness. Only a few pertinent verses and Hadiths will be enlisted here, which can be extremely instrumental in counseling, preventive efforts and public campaigns aimed at combating lifestyle-related medical dilemmas.

“ … and eat and drink but waste not by extravagance, certainly. He (Allah) likes not those who waste by extravagance.”

The Glorious Qur’an: Chapter 7: Verse 31.

“The son of Adam has never filled up a vessel worse than his stomach. For the son of Adam, it is enough to eat a few bites to support his body, and when he is going to eat, he should allocate one third (of his stomach) for his food, one third for his drink, and one third for his breath.”

Hadith authenticated by Sahih Ibni Hibban # 5236, and Sunan Ibni Majah #3349.
“The believer eats in only one bowel (stomach), and the non-believer eats in seven bowels.”

Hadith authenticated by Al-Bukhari # 5079

The Prophet (PBUH) dispraised (considered blameworthy) those people characterized by being fat (or they like to be fat).

Hadith authenticated by Muslim #2534

“Allah is pleased with those people that have a reason (motive) in eating.”

Hadith narrated by Al-Bukhari # 2651, 3650, 6428, 6695

And as narrated by Abu Dawoud ““and obesity spreads among them”. In this Hadith, obesity is listed together with other serious vices and behaviors.

“All after them, people will come, who work to get obese, who like to be obese, and who provide testimony prior to being asked for it.”

Hadith authenticated by Tarmithi #2222

“It is out of extravagance (waste) to eat all what you desire (or crave for).”

Narrated by Ibni Majah through Anas Ibni Malik:

“The food (nutriment) of one person is sufficient for two, and the food of two is sufficient for four persons.”

Authenticated by Muslim, through Jaber (The Book of Food).

Ibnu Majah narrated in his Sunan (The Book of Food) through Um Ayman, that she sieved the flour to remove the bran (fiber), in preparation of a loaf of bread for the Prophet (PBUH). The Prophet asked, “What is this?” She said, “This is food we make in our land, and I wanted to make from it loaf of bread for you.” He said, “Return it (the bran) back, then mixed it in a dough.”

The Prophet (PBUH) instructed her to keep the bran in the flour, in the preparing of the bread. More than fourteen countries later, the medical profession discovered the important of bran and fiber in proper dieting.

From our Islamic heritage and wisdom derived from the Prophetic guidance, Omar, the Caliph (a student of the Prophetic lifestyle), said, “Beware of gluttony (overeating), it is a cause of decay to the body, a source of illness and a cause of negligence (laziness) towards prayers, seek moderation and stay away from extravagance (excess waste)...”

Imam Shafii said, “Filling the stomach begets heaviness of the body, cruelty of the heart, decay of intelligence (cleverness), imposes sleep, and weakness from worship.”

There is a well-known traditional health statement. “The stomach is the origin of sickness and dieting is the mainstay of cure”.


**Physical Fitness**

“The best of men for you to hire is the strong, the trustworthy.”

The Glorious Qur’an: Chapter 28 : Verse: 26

“Your body has a right up on you.”

Hadith authenticated by Al-Bukhari, #1876.

“The strong Muslim is better and more loved by Allah than the weak Muslim.”

Hadith authenticated by Muslim #2664.

Omar, the second Khalifa, wrote to the people of Sham (Syria): Train your children to practice swimming, throwing (flinging, shooting) and order them to jump up swiftly on horses.

This valuable heritage should be properly utilized by religious leaders, mosque imams, the media, the school systems and medical practitioners in persistent and continuous efforts to preserve and maintain healthy lifestyles.

Concerned medical practitioners, especially diabetologists and cardiologists, have the obligation and leadership to foster the formation of activist alliances in their communities, with the media, religious leaders and health authorities to reverse the deleterious trends of diabetes and its consequences.
Suggested Readings

آفاق طبية

مرض السكري يتصاعد خطوته في بلدان الشرق الأوسط

علي مشعل
رئيس اللجنة المؤسسية (الأمراض الطبية)، المستشفى الإسلامي، عمان، الأردن

تشير الدراسات المسحية إلى تزايد انتشار مرض السكري من النوع الثاني، إلى أبعاد واسعة، وخصوصًا في منطقة الشرق الأوسط، إضافة إلى جائحة انتشار السمنة والمشاركة الاستقلالية لدى كافة الفئات العمرية.

حسب تقديرات انتشار هذا المرض للعام 2020 فإن منطقة الشرق الأوسط توقع بها أن تكون الأعلى بين بلدان العالم. وتبناً لذلك مستعداد انتشار أمراض القلب والشرايين والوفيات الناتجة عنها وعوائقها الصحية والاجتماعية والاقتصادية.

وقد يقول البعض أن هذا الانتشار الكبير إذا يرجع إلى التكيب الجيني الوارثي لسكان هذه المنطقة، إذ أن المعروف أن هناك أكثر من أربعين من العوامل الجينية تمكن بالإصابة بالسكري من النوع الثاني.

غير أن العوامل الجينية الدولية لا تقدم تفسيرًا منحلاً لزيادة المِدَاطرة هذه الجائحة في منطقتنا. فهذه العوامل كانت موجودة في أسلفنا الذين لم يكونوا يعانون من هذا الانتشار الكبير في المرض. فالعوامل الجينية تستغرق أشعة طويلة نسبيًا لإحداث تأثيراتها الصحية في هذا المجال. ولكن الذي تغير في حالة هذه المنطقة هو أفق الحياة في الطعام ومستويات الجهد البدني التي احتاجتها مجتمعنا وجعلها تعرف، وفِرْسِيَّة ل هذا الوباء الجديد عليها.

تعاني البلدان النامية، والأردن من بينها، من مجموعة أَكْثَر من المُنَاَمِيَّة في حمولة توثيق المعلومات والإحصاءات الصحية والنباتات الاجتماعية للأمراض والعلاج، ومن بينها مرض السكري ومضاعفاته. غير أن التقدير العام يشير إلى تكيد مرضى السكري في العالم، مالامةً تقلبه تزايد باستمرار، وتضاعف في كل عقد من الزمان، كما أن المرض ومضاعفاته يمتد ليصيب فئات عمرية غير مُتوافقة في الشباب والأطفال ب המחٌراَةَ.

تقول ما هي عليه الحال في البلدان العربية.

في الولايات المتحدة الأمريكية، أجرى المركز الوطني للإحصاءات الصحية دراسة مَسحية واسعة شملت 42883 شخصًا، كجزء من دراسات مستمرّة لمؤشرات السلوكات الصحية وتفاعلاً. وظلت الدراسة أن هناك تغسيًّاً ملحوظًا في نسبة وفيات أمراض القلب والشرايين الناتجة عن مرض السكري التي ارتفعت حوالي 50% بين عامي 1995 و2002. وتشير دراسات أخرى أن مثل هذا التحسن قد حدث أيضًا في بلدان غيرية أخرى. وقَدَّرت الدراسات أن تحسن جُرَّام الانتشار القلبي والشرياني لدى مرضى السكري حتى ولم يكن هناك انخفاض في أُوَّاضهم.

في الأردن، أظهرت دراسة امتحانية أن نسبة الأطفال المصابين بمرض السكري وحالات الاستعداد لم تصل إلى 3% من النساء الذين تجاوز عمرهم 25 عامًا، ونَوْعَت أن يكون الحال مثابًا في أقفار الشرق الأوسط وشمال إفريقيا. ويتربّع على ذلك تدراسات ومضاعفات متزايدة من النواحي الصحية والاجتماعية والاقتصادية.

كما أشارت دراسات أخرى في الأردن إلى تزايد الإصابة بزيادة الوزن والسمسمة والتدخين واضمحلل مستويات الجهد البدني والرياضة.

وقد هذه العوامل من مسببات زيادة خطورة أمراض القلب والشرايين، وامتدادها إلى فئات عمرية أصغر سنًا مما كانت تصاب به في السابق، وأصغر
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From.melacoma in the.Arabic.

And can be summarized as follows:

- The Middle Eastern diabetic (AMB) study: years of experience have led to the accumulation of evidence that confirms the relationship between diabetes risk and obesity.
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- Increase in diabetes risk in the Middle East with lifestyle and environmental factors.
- Increased emphasis on physical activity and healthy eating habits.
- Importance of education and awareness programs.

In the Middle East and the Arab world, diabetes risk is on the rise due to changes in lifestyle and environmental factors. Regular physical activity and a healthy diet are essential in preventing diabetes. Educational programs and awareness campaigns are crucial in addressing this issue.
وهنا تتجلى حكمة بالغة التدلاية حول فوائد النحالة والآليات في الغذاء، وهو ما كشفه العلم الحديث بعد أربعة عشر قرنًا من الزمان.

ومن الحكم المستندة إلى الله رضي الله عنهم: "إياكم وربكم إذا فما مفسدة للجسم ومورثة للساق، وكسلسة عن الصلاة، وعليكم بالقصد فإنه أصلح للجسم وأبعد عن السرف، وإن الله ليبغض الحجر السمين.

كما قال الإمام الشافعي رحمه الله: "الصحاب دين الله، ينقلون بين اليد، ويقلن القلب وييلبف الطائفة ويجب النوم ويبذله صاحبه عن العبادة.

وقد تردد في الآثار الصحية الإسلامية القول الشائع: "المUDENT بيت الداء والخدمة، رأس الدواء" (كتاب الرجوع في الطب والحكمة جلال الدين السيوطي).

الرياضة واللياقة البدنية

الآية الكريمة (وإن خير من استأجرت القوي الأمين). سورة القصص: آية 26

الحديث: "إن للحدمة عليك حظا. صحيح البخاري (1876).

الحديث: "المؤمن القوي خير وأحب إلى الله من المريض الضعيف". صحيح مسلم (2664).

وكتب الخليفة عمر، وهو تلميذ الهدي الربوي، إلى أهل السام:

"علموا أولادكم السباحة والرمية وركوب الخيل وموتهم فشيئا على الخيل وثبًا.

هذه الحقائق العلمية المنيرة على الدليل، والمعرفة بمذاهير إرثنا من الهدي الإسلامي، يجب أن يتمثل المهنئون بصحة مجتمعهم وخصوصاً اختصاصي أمراض السكري والقلب وغيرهم من الذين يقع على عاتقهم مسؤوليات كبرى في قيادة التوجيه والتثقيف وخلق شراكات عملية مع قادة الرأي والثواب فيوسائل الإعلام والسلطات الصحية وأنظمة التعليم بكافة مستوياتها، وإلى القادة الذين يعملون كثيرا لوقف هذا الوباء الراضي وعلى عقباته الوبيئة.

المراجع المشرفة: مع النسخة الإنجليزية من هذا العدد.