



## **AUB Faculty to Lead First Audit on Osteoporosis in the Region- Report shows an alarming projected increase in the social and economic burden of osteoporotic fractures in the Middle East and Africa.**

The Middle East Africa IOF Audit Report on Osteoporosis was released at the IOF Regionals – 1<sup>st</sup> Middle-East & Africa Osteoporosis Meeting, October 19-22, 2011 in Dubai, a meeting that was held under the Patronage of HH Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and Industry, U.A.E, and of its Health Authority. The meeting noted 1016 registrants from 56 countries.

The Audit Report Key Findings were presented by Professor El-Hajj Fuleihan at the opening of the Regional Meeting on Oct 19 and again at its closing during a press conference that took place on Oct 22, attended by Dr. Abdulla Bin Souqat, Executive Manager of Sheikh Hamdan Bin Rashid Al Maktoum Award for Medical Sciences, representing HH Sheikh Hamdan Bin Rashid Al Maktoum.

This first Audit on Osteoporosis in the region, was initiated by the IOF in the Fall of 2010, and led by a Professor Ghada El-Hajj Fuleihan, head of the Audit Steering Committee and Lead Author of the Audit Report, in collaboration with the Pan Arab Osteoporosis Society (PAOS). The Audit team included Dr Rafic Baddoura at St Joseph University, and Drs Najla Itani and Asma Arabi at AUB.

Gathering data from 17 countries in the Middle East and Africa as well as Turkey, 'The Middle East & Africa Regional Audit' is a landmark report examining

epidemiology, costs and burden in individual countries as well as collectively across the region. The report predicted a major increase in fractures for the region as a whole. With the demographic explosion the number of people over the age of 50 in the region is expected to exceed 25% of the population in several countries by 2020, and to reach up to 40% by 2050. This means that by 2050, the number of hip fractures would quadruple in Lebanon, Jordan, and Syria. Mortality from such fractures reaches 40-60% within the first three years, rates that are 1.5-2 folds as high as that reported in western countries, the report warned.

An alarming finding from the report shows that solid epidemiological research on osteoporosis and fracture incidence, and related relevant outcomes, is scarce at best. The Lead Author of the report, Professor Ghada El-Hajj Fuleihan, Director of the Calcium Metabolism and Osteoporosis Program, and Director of the WHO Collaborating Center for Metabolic Bone Disorders, at the American University of Beirut, commented: "This Audit report reveals that a great research gap needs to be filled in the region. Published data on incidence rates for hip fractures are only available for Lebanon, Iran, Kuwait, Saudi Arabia Morocco and Turkey. Furthermore, it reveals that access to densitometry and care is limited in many countries, and reimbursement for diagnostics and therapeutics varies widely. Finally, only 4 countries in the region have an on-line fracture risk calculator, a tool that greatly facilitate patient fracture risk assessment and thus care. Other countries with a FRAX calculator are Jordan, Tunisia and Turkey". FRAX Lebanon was the first in the region, launched in Sept 2009, and made possible through a collaboration between AUB's Osteoporosis Program and the WHO FRAX group led by Prof Kanis, using data from the national hip fracture registry at the MOH, made available to the research team at AUB. One of the primary recommendations of this report is the need for more research to gather the necessary evidence that would aid health authorities to develop comprehensive healthcare policies at all levels.

"Lebanon in general and AUB in particular is a model for successful collaborative work between academia, national osteoporosis societies, and official stakeholders, a collaboration that led to enacting relevant health care initiatives and policies that we hope will ultimately impact health care and outcomes in general and osteoporosis in particular", underscored Professor El-Hajj Fuleihan. Lebanon was indeed showcased as such by Dr Rafic Baddoura in one of the early IOF meeting sessions in Dubai. He also outlined the initiatives needed in Lebanon to reduce the incidence of osteoporotic fractures, their burden, highlighting the key role of OSTEOS (Lebanese Society of Osteoporosis and Metabolic and Metabolic Bone Diseases) in this endeavor.

Widespread vitamin D deficiency and low calcium intake may be in part responsible for the alarming increase in osteoporosis. The prevalence of hypovitaminosis D in the region is one of the highest in the world, and has been estimated to exceed 50% in most countries, reaching up to 80% in several countries, across all age groups, and despite ample sunshine in the region.

The above was detailed in reviews authored by Audit Team , published in the prestigious scientific magazine Nature Reviews and featured in the Audit report. Dr. Gemma Adib, first author of the report and General Secretary of the Pan Arab Osteoporosis Society, stated "Vitamin D is an essential component of bone health and a relatively inexpensive way to decrease fracture risk. It is essential that the region develops vitamin D supplementation strategies based on local data for at-risk groups."

IOF President, Professor John A. Kanis, gave a presentation at the meeting opening comparing and contrasting statistics on osteoporotic fractures in the region to the west, and also spoke at the launch of the Audit and commented, "Despite the severity of the problem, osteoporosis is being dangerously ignored as it competes with other diseases for scarce healthcare resources and recognition. Notwithstanding the burden of fragility fractures, osteoporosis remains greatly under diagnosed and under treated, and both health professional training and public awareness is sub optimal in most countries in the region. The result is premature death for many hip fracture sufferers, immense personal suffering, lost productivity and long-term dependence on family members."

In her presentations Professor El-Hajj Fuleihan particularly acknowledged the hard work of members of the Audit team, namely Dr Najla Itani, who rotated as research fellow in her program during the data gathering phase, for her immense contribution to the design and conduct of the literature search with the help of Ms Farha, Librarian at AUB 's Saab Medical Library, and for coordinating contacts with Audit stakeholders, and synthesis of country templates, Dr Asma Arabi, Assistant Prof Medicine at AUB, for her assistance with the review of papers and templates and validation of the information supplied by some countries, and Dr Rafic Baddoura, Head of Rheumatology Division at St. Joseph University, for sharing primary data from his review on osteoporosis in the Eastern Mediterranean Region. She also acknowledged the instrumental support of leadership first at AUB, and also at St Joseph University, Lebanese National Council for Scientific Research (CNRS), WHO, and Pharma, in funding landmark studies that contributed to major parts of the Audit. Prof El-Hajj Fuleihan underscored the pivotal role of officials at the Ministry of Health, Drs Mohammad Khalifeh and Walid Ammar, and at the WHO Lebanon and EMRO offices, Drs Alissar Rady, Mahjour, Siddiqui and El-Gezairi, underscoring their engagement and support of research activities advancing the field of osteoporosis, nationally and regionally.



***The Middle East and Africa Regional Audit*** is published by the International Osteoporosis Foundation (IOF) . The report can be downloaded free of charge from the IOF website at [www.iofbonehealth.org](http://www.iofbonehealth.org). The Audit Report Arabic and English Versions will be made available on the website of the Calcium Metabolism and Osteoporosis Program [http://staff.aub.edu.lb/~webcmop/downloads/ME\\_audit.pdf](http://staff.aub.edu.lb/~webcmop/downloads/ME_audit.pdf)

The report is being launched in conjunction with the opening of the IOF Regionals – 1<sup>st</sup> Middle-East & Africa Osteoporosis Meeting, October 19-22, 2011. The Meeting has received the official patronage of Sheikh Hamdan Bin Rashid Al Maktoum, Deputy Ruler of Dubai, Minister of Finance and Industry, U.A.E, represented by Dr. Abdulla Bin Souqat, Executive Manager of Sheikh Hamdan Bin Rashid Al Maktoum Award for Medical Sciences.