LEA | Lebanese
Epidemiological
Association

The LEA 16th Annual Conference

In partnership with **CSA**

CENTER FOR STUDIES ON AGING
TRANSLATING RESEARCH INTO POLICY & PRACTICE

The Elderly in Lebanon:

Expanding the research agenda to meet current and future challenges

Gefinor Rotana
November 25 – 26, 2011

For More Info:
www.lea–lb.org
Dr. Mary E. Deeb, PHD
mary.deeb@gmail.com

World Health Organization

Infomed
INTERNATIONAL FOR EVENTS

Member of
IAPCO
MEETING QUALITY

Welcome Letter

As we go through the demographic transition in the Eastern Mediterranean should we be worried about the rise in the elderly population in Lebanon in the next few decades?

What was the changes in life expectancy over the last decade, what are the mortality rates for those above the age of 65? How much of health resources are driven by healthcare for the elderly as compared to the adult and young population?

Do elderly face more barriers to access healthcare compared to subjects below the age of 65? How many of the older adult population require healthcare assistance at home? What are the healthcare priorities among the elderly? What are the most debilitating health conditions that require assistance at home or admission to a long-term residence?

How much health inequities do exist between those who benefit from retirement pension and those who don't? What are the strongest social determinants of health among the elderly? Where are we regarding pension reform in Lebanon? What consequences could we forecast as a result of delays?

These are a few among the many questions one might raise about the elderly in Lebanon and the Eastern Mediterranean. We solicited the participation of worldwide and regional experts, researchers and stakeholders involved in issues relative to the elderly and called for the submission of abstracts of unpublished research and health interventions.

We are honored to have the collaboration of the Center of Studies on Aging. We are extremely appreciative of the constant support of UNFPA to the LEA activities. We would like to thank also the WHO for its sponsorship.

The Lebanese Epidemiological Association look forward to sharing data and information relevant to the health and healthcare of the elderly in a challenging context of demographic transition, globalized economy and raising healthcare demand and costs.

Mary E. Deeb, PhD
President of the Lebanese
Epidemiological Association
www.lea-lb.org

Organizing and Scientific Committee

Rafic Baddoura, MD, MPH
Mary E. Deeb MPH, PhD
George E. Karam, MD
Abla-Mehio Sibai, PhD

Lebanese Epidemiological Association XVIth Annual Meeting
In collaboration with the
Center for Studies on Aging

The Elderly in Lebanon: Expanding the Research Agenda to Meet Current and Future Challenges"

November 25-26, 2011
Gefinor Rotana Hotel, Beirut-Lebanon

Program

FRIDAY November 25th

OPENING SESSION: 18.00-19.00

WELCOME ADDRESS   18.00-18.30
Lebanese Epidemiological Association: **Mary E. Deeb**
Center for Studies on Aging: **Abla Mehio-Sibai**
Ministry of Health: His Excellency **Ali Hassan Khalil**
Ministry of Social Affairs: His Excellency **Wael Faour**
Ministry of Labor: His Excellency **Charbel Nahas**
World Health Organization Representative: **Sameen Siddiqqui**
UNFPA Representative: **Asma Kurdahi**

KEYNOTE ADDRESS:
•Prospects of aging in the Eastern Mediterranean Region and potential implications for health and social policies

Speaker: **Youssef Courbage**, Institut National D'etudes Demographiques (INED), France
                                                18.30-19.10

WELCOME COCKTAIL   **19.10- 20:00**

SATURDAY November 26th

Session I: Emerging Demographic Challenges in Lebanon 　　　　**09:00-10:30**
MODERATORS: **Laurie Abi-Habib** (Balamand University), **Youssef Courbage** (INED),
Jacques Kabbanji (LSS), Ministry of Labor Representative (TBD)

•Prospects of aging in Lebanon and potential implications for health and social policies
Speaker: **Hala Naufal**, Population studies, Lebanese University 　　　　**09:00-9:15**
Discussion

•The demographic youth bulge in the MENA region
Speaker: **Nabil Kronfol**, Center for Studies on Aging 　　　　**09:20-9:35**
Discussion

•Pension plans reform agenda for Lebanon
Speaker: **Kamal Hamdan**, Centre for Economic Research, Lebanon 　　　**09:40-9:55**
Discussion

•Economic prospects for pension plans and healthcare of the elderly in Lebanon
Speaker: **Ibrahim Muhanna**, Muhanna Foundation, Actuaries and Management consulting.
Lebanon 　　　　**10:00-10:15**
Discussion

Coffee Break 　　　　**10:30-11:00**

MODERATORS: **Walid Ammar** (MOPH), **Monique Chaaya** (LEA), **Sameen Siddiqui** (WHO)

Session II: Non-communicable disease in the older population 　　　**11:00-12:30**

•Epidemiology of fragility factures among the elderly: East versus West and the move
forward
Speaker: **John Kanis**, President of the International Osteoporosis Foundation, Sheffield
University, UK 　　　　**11:00-11:20**
Discussion

•Prospects of osteoporosis in the Middle East and Africa; the outcome of the IOF
regional audit
Speaker: Ghada El-Hajj Fuleihan, Calcium and Bone Metabolism Unit, AUB-MC
　　　　11:30-11:50
Discussion

•Mental Health of the Elderly in Lebanon: insight from a population-based survey.
Speaker: **Georges Karam**, IDRAAC, St Georges Hospital, Balamand University
Discussion **12:00-12:10**

•Dementia: A Review of Studies in the Arab World
Speaker: **Lynn Itani**, IDRAAC, St Georges Hospital, Balamand University
Discussion **12:15-12:25**

Lunch Break **12:30-13.30**

MODERATORS: **George Karam** (IDRAAC)**, Nabil Kronfol** (LHMA)**, Abla Sibai** (CSA)

Session III: Epidemiological surveys among older adults in Lebanon **13:30-15:00**
•What is the health profile of institutionalized elderly subjects in Lebanon: the preliminary outcomes of a census survey
Speaker: **Rita El-Hayek**, Geriatrics, St Joseph University **13:30-13:40**
Discussion

•Elderly subjects attending Ministry of Social Affairs centers in Mount Lebanon: preliminary results of a descriptive survey
Speaker: **Rafic Baddoura**, Head Rheumatology department HDF, St Joseph University
Discussion **13:45-13:55**

•Living conditions and nutritional status among a population-based sample
of elderly subjects
Speaker: **Christa Boulos**, Nutrition department, St Joseph University **14:00-14:10**
Discussion

•Oral Health and nutritional status among a population-based sample of elderly subjects
Speaker: **Myrna El-Helou**, Nutrition department, St Joseph University **14:15-14:25**
Discussion

•Mental health of Lebanese older adults in South Lebanon following exposure to
war traumas: Challenges and recommendations
Speaker: **Laila Farhood**, Hariri School of Nursing and Psychiatry Dept, American
University of Beirut, Lebanon **14:30-14:40**
Discussion

•Elderly Hospitalization Healthcare Experience in Lebanon
Speaker: **Lana O' Son**, University Medical Center Hospital Rizk, LAU School of Medicine
Discussion **14:45-14:55**

Prospects of aging in Lebanon and potential implications for health and social policies.

Hala Naufal, Professor of Population Studies, Lebanese University.

Abstract

Lebanon is somehow unique in the Arab context. It has reached a mature stage of the second phase of demographic transition from high to very low birth rate after the fall of its death rate. Decreasing fertility along with lengthening life expectancy has reshaped the age structure of the population by shifting relative weight from younger to older groups. The proportion of older persons, 65 years and over, has increased from 6.7% in 1996 to 7.4% in 2004, and is expected to reach 10.2% by 2025; this increase has gone hand to hand with a decline in the proportion of the youngsters 0-14 years, from 29.4% in 1996 to 27.3% in 2004 then to an expected 19.5% in 2025. This phenomenon has major implications on the social, economic and health care levels. Therefore, Lebanon will need to plan carefully its social, economic and health policies and programs to find ways and means to assist elderly people, their families and communities, to cope with the new demographics.

Based on the latest surveys data and some international estimates and prospects, the study explores population ageing from a demographic perspective, and its socio-economic and health aspects. It also examines the legislative and institutional contexts, and assesses health care and social policy implications of demographic trends in the context of the Health Sector Reform and the Ministry of Public health Strategic Plan, as well as the National Program targeting the poor launched lately by the Ministry of Social Affairs.

The findings of the study allow us to suggest some measures that can be taken to assist elderly people, their families and communities:

- Conduct studies assessing elderly people needs.
- Implement 2000 "old-age pension plan" proposal.
- Implement legislation for the integration of geriatrics into university and medical/nursing school curricula across Lebanon.
- Establish national standards for Nursing Homes (NHs) care.
- Improve NHs and care centers, increase the medical services they offer, and establish services with different levels of care (daily living, dementia, chronic medical illnesses).
- Empower the community to deliver social services through volunteer organizations addressing multiple aspects of elderly care.
- As family support is a great benefit for the Lebanese elderly, the creation of support groups can be very helpful to the community.

The Demographic Youth Bulge in the MENA region

Nabil M Kronfol MD, DrPH , Professor of Health Policy and Management
and the co-founder of the Center for Studies on the Older population in Lebanon.

Abstract

Understanding the relationship between population change and economic growth has taken on added importance in recent years because the world's developing countries are in varying stages of a demographic transition from high to low rates of mortality and fertility. This transition produces a "boom" generation that is gradually working its way through each nation's age structure.

As the boom generation enters working age, there is the opportunity to unleash an economic growth spurt, provided the right kinds of policies are in place to ensure the extra workers are productively employed. For this reason, policymakers should benefit from a clearer understanding of the relationship between economic development and the changes in age structure that result from the unfolding demographic transition.

Because birth rates remained high until the 1980s and then declined sharply, the proportion of young, active, working-age individuals in the current Lebanon and the MENA population is exceptionally large. Those born between 1975 and 1995 (now young adults) are providing their home societies with a demographic "gift.". Several critical policy areas impact on this opportunity: These include Education, Employment, Health, Migration, Participation in public life, Gender matters and Ageing.

This presentation is a brief review of the demographic situation in Lebanon and the MENA region and the impact of education, employment, migration, health status, participation on the further development of the region, including their impact on Ageing and the gender issues. This review draws on published reports and studies by international organizations and researchers. No new data or findings are presented in this paper. The intent is to draw attention to the importance of these demographic changes and highlight the need for action to maximize the potential benefit to the population in this region.

The Middle East and Africa IOF Osteoporosis Audit:
Key Findings

Ghada El-Hajj Fuleihan, MD, MPH, Director Calcium and Bone Metabolism Unit, AUB-MC

Abstract

In its 2010 Global Status Report on Non-Communicable Diseases (NCDs), the World Health Organization (WHO) identified NCDs as the leading cause of death, accounting for 2/3 of all causes of deaths worldwide. The impact of NCDs identified by WHO, namely cardiovascular illnesses, diabetes mellitus, obesity, cancer and chronic respiratory diseases, is projected to further increase due to global urbanization, sedentary lifestyle, obesity epidemic, and an increase in life expectancy in populations across the globe. Although osteoporosis was not on that list, it is no exception to the rising NCD tide, not only sharing common risk factor, but also contributing substantially to a heavy social and economic burden on society, and more so in the Middle East and Africa. Indeed, whereas 8-20% of the population from this region is over 50 years, the proportion will reach 25% in 2020 and 40% in 2050, in several countries. The audit launched by the International Osteoporosis Foundation, assesses disease burden and identifies gaps in knowledge and care relevant to osteoporosis in the region.

A thorough comprehensive on-line literature search was conducted by the American University of Beirut team for all 67 countries identified as part of Middle East and Africa by the World Bank. The audit focused on 17 countries: Bahrain, Egypt, Iran, Iraq, Jordan, Kenya, Kuweit, Lebanon, Palestine, Morocco, Qatar, Saudi Arabia, South Africa, Syria, Tunisia, Turkey, and the United Arab Emirates (UAE).

Data on hip fracture incidence were provided in nine countries, but were not population-based in the majority, numbers that often could not be validated.

Age-standardized varied between 250 and 350/100,000 persons per year for Lebanon, Kuwait and Iran, and were close to those reported in Southern Europe. Only 4 of the 67 countries in region have an online FRAX calculator: Jordan, Lebanon, Tunisia, and Turkey; that in Lebanon was developed using data from a population based national hip fracture registry established by the MOH. Information on prevalent vertebral fractures was even scarcer, ranging around 20-25% in women > 65 years, incidence data is practically non-existent.

Osteoporosis was identified as a health priority in Jordan, Iraq and Iran, national osteoporosis guidelines were available in Lebanon, Egypt, Iraq, Iran and South Africa, and were endorsed by government only in Lebanon and Iraq. Access to DXA machines was very limited, at less than 5 machines /million population, with the exception of Bahrain, Kuwait, Lebanon, Turkey and UAE. Most approved anti-resorptive drugs were available in the majority of countries, whereas PTH analogs were in only half. Reimbursement for diagnostics and therapeutics varied widely. Despite favorable latitudes, hypovitaminosis D was prevalent (>50% of groups studied); predictors included older age, female gender, multiparity, season, clothing style and low SES .

This audit is the basis for a call for action for joint efforts, between academic institutions, national societies, and governmental entities, to gather good evidence on disease burden, increases awareness, and thus close the care gap and thus ultimately impact this costly disease.

Mental health status of the elderly in Lebanon

Georges E. Karam, MD, IDRAAC, St Georges Hospital, Balamand University.

Abstract

Large-scale psychiatric epidemiologic studies have become increasingly common in industrialized countries in the past decade in response to mounting concerns about the prevalence and burden of mental disorders. Psychiatric epidemiological surveys are much less common, in comparison, in the Arab World and have so far focused on small populations. Furthermore, although war has been linked to a higher risk of mental disorders, no previous study has comprehensively assessed on a national level the effect of war on the first onset of a broad range of mental disorders during the life span of individuals. In an effort to address these issues, the Institute for Development, Research, Advocacy and Applied Care (IDRAAC) with the Department of Psychiatry and Clinical Psychology at Balamand University and Saint George Hospital University Medical Center conducted the first nationally representative general population survey of mental disorders in Lebanon and the Arab World: the Lebanese Evaluation of the Burden of Ailments and Needs Of the Nation (LEBANON) survey. This survey is part of the World Health Organization (WHO) World Mental Health (WMH) Survey Initiative, a series of coordinated, large-scale psychiatric epidemiologic surveys carried out in over 30 countries in the world.

The rate of mental disorders was evaluated and measured among the adult Lebanese (older than 18).

Among the 65 and older age group, 10.6% suffer from anxiety, 9.3% suffer from a mood disorder and 3% had suicidal ideation.

However, among those that suffer from a mental disorder, only 17.7% used a psychotropic medication over the past year.

Dementia: A Review of Studies in the Arab World

Lynn Itani, IDRAAC, St Georges Hospital, Balamand University.

Abstract

With the trend of increasing life expectancy, the prevalence of mental health illnesses that are more common among the elderly, such as dementia, is also at the risk of increasing. A review of published articles about dementia in countries of the Arab world was conducted in order to investigate knowledge about the disease in this region. Studies were reported from the following countries: Egypt, Jordan, Kuwait, KSA, Lebanon, Oman, Qatar, Tunisia, and UAE. Research articles mainly describe: the prevalence of dementia among community and clinical samples, socio-demographic and genetic risk factors, and properties of treatment. Results show that there is an evident research gap with respect to dementia in the region.

Association between nutritional status and living conditions in community dwelling elderly living in Lebanese rural areas: a Pilot Study.

Christa BOULOS, MD[1]; Pascale SALAMEH, PharmD, MPH, PhD[2]
Department of Nutrition and Dietetics, Faculty of Pharmacy, Campus of medical sciences, USJ, Beirut, Lebanon
 Faculty of Public Health, Lebanese University, Beirut, Lebanon

Abstract

BACKGROUND: Malnutrition is one of the most common problems in geriatric population. It increases morbidity and mortality and decreases quality of life. The prevalence of malnutrition depends on the life conditions of the elderly and diagnostic criteria used. Malnutrition has numerous causes including age-related alterations as well as social, psychological and pathological factors.

AIM OF THE STUDY: to determine the prevalence of malnutrition in community dwelling Lebanese elderly living in rural areas and its relationship with socioeconomic and health conditions.

METHODS: A cross-sectional study was conducted between February 2011 and April 2011. It included a representative sample of 140 elderly aged 65 y and above living in rural areas of the Caza of Koura, Batroun (North Lebanon) and the Caza of Metn, Baabda (Mount Lebanon). The sample was chosen randomly from the list of inhabitants of one or two villages (depending on the size) in each of the four Caza selected on a random base. After an oral informed consent, participants were questioned by the interviewers in a door to door visit. The following data were collected: nutritional status (assessed by the Mini-Nutritional Assessment), eating habits, cognitive status (MMS), mood (5-item GDS), functional status (ADL, IADL), quality of life (5 items WHO-well being index), social network and loneliness as well as information on health, medication and sociodemographic characteristics. Malnutrition was defined by a MNA score < 17, whereas a score between 17 and 23,5 was considered as nutritional risk. Data was entered and analyzed by SPSS software, version 19.0.

RESULTS: Among our study population, 75% were well nourished (MNA ≥ 24), 22.9% are at risk of malnutrition and 2.1% malnourished. Applying univariate analysis, increased risk of malnutrition was observed in women ($p < 0.001$), widowed or single ($p < 0.001$), low educated elderly ($p = 0.011$), as well as in case of low income ($p < 0.001$), polymedication ($p=0.001$), oral health problems ($p = 0.004$), physical disability, depression, reduced social contact and cognitive decline ($p <0.05$).

CONCLUSION: Beside the relative low prevalence of malnutrition among our study population we found a high proportion of elderly at risk of malnutrition especially in particular subgroups. This highlight the need to screen and support elderly people.

Mental health of Lebanese older adults in South Lebanon Relationship between oral health and nutritional status in elderly: a hospital-based pilot study

El Hélou Myrna, M.Sc. (1); Boulos Christa, MD (1); Tabbal Nabil, MPH (2); Adib Salim, MD, DrPH

Abstract

Background: Oral health influences general health status and well-being in the elderly. Poor oral health can affect food intake and nutritional status of the individuals. So far, no study has attempted to describe the oral status of Lebanese elderly or its association with their nutritional status.

Objective: This study aims to describe the relationship between oral health and nutritional status in a population of Lebanese elderly admitted to the hospital.

Method: A number of 115 elderly aged over 70 years were selected in a non-random accidental sampling during 3 consecutive months from the various wards of the University Hospital of Rafik Hariri (RHUH) in Beirut. Medical, socio-demographic, anthropometric and food data were collected according to inclusion criteria. Nutritional status was assessed by the Mini Nutritional Assessment (MNA), while the evaluation of oral health was performed by the Geriatric Oral Health Assessment Index (GOHAI), a tool evaluating self-perception of oral health status, followed by an oral inspection.

Results: The prevalence of malnutrition in the study population was 6.1% (MNA < 17) whereas the risk of malnutrition was 37.4% (17 ≤ MNA <23.5). About 56% of the elderly population were in need of dental care (GOHAI score >14) and more than 50% of these individuals were at risk of nutritional deficiency (unadjusted OR 2.48, 95% CI 1.15 - 5.38, p = 0.019). The fourth quartile of GOHAI score, which indicates a negative perception of the oral status, was significantly associated with the risk of nutritional deficiency (unadjusted OR 3.76, 95% CI 1.38 - 10.28). This association was no longer significant after adjustment for confounding variables.

Conclusion: This study showed an association between oral health and nutritional status. Our results may suggest the importance of oral care within the Lebanese elderly population in order to reduce the risk of malnutrition and improve oral health-related quality of life.

Mental health of Lebanese older adults in South Lebanon following exposure to war traumas: Challenges and recommendations

Leila Farhood, Hariri School of Nursing and Psychiatry Dept, American University of Beirut, Lebanon.

Abstract

BACKGROUND: Older adults are at higher risk for developing mental disorders. Exposure to traumatic events is associated with the development of PTSD and depression with development of symptoms occurring with more severity in older age groups. Mental health concerns and psychiatric disorders often time go unnoticed in primary healthcare settings. Lack of available mental health services and accessibility has led to a population with severely unmet mental health needs. Untreated mental health problems can exacerbate existing health problems, with undiagnosed disorders often masked by a physical complaint or condition. For primary healthcare service providers, understanding mental health concerns in older adults is crucial to recognizing a mental health problem and providing proper treatment.In light of high prevalence rates and little to no access to care, meeting the mental health concerns of older adults should be a priority for public policy makers.

Objective: To report on prevalence and predictors of mental health with a focus on older age groups and associated risk factors. To offer recommendations for mental health services and polices based on published research and knowledge of the mental health sector.

Method: This is a secondary analysis of two studies conducted by the author to assess the mental health of villages in South Lebanon 5 years after the Israeli occupation (Farhood&Dimassi, 2011) and again in 2007 one year after the July 2006 war (Farhood, Dimassi, Strauss & van Lunteren, revision). The analysis assessedprevalence and predictors of PTSD, depression and general health as well as mediating factorsin older adults who had experienced exposure to war-related traumatic events.

Findings: In the 2005 study, PTSD and depression prevalence rates for older adults (60+) compared to younger age groups were higher, with risk increasing with age. The same trend was observed in the 2007 study. In both studies, the older adult population was shown to be highly traumatized. In an analysis of female mental health and risk factors, older women were more at risk for psychiatric morbidity than their male counterparts.

Conclusion: Older adults are at high risk for developing mental health disorders with female gender increasing vulnerability. Exposure to trauma increases the likelihood of developing mental disorders. Providing awareness of the importance of establishing mental health care services as part of over-all wellbeing in older adult populations is imperative especially in regions continuously exposed to conflict and instability. On a local level, the inclusion of mental health care and prevention in treatment, providing access to care, establishing professional development to ensure proper diagnosis, and public education for recognizing and managing mental health problems in older adults are fundamental to health and wellbeing.

Elderly Hospitalization Healthcare Experience in Lebanon

Carla Bedran, Rita Chahinian, Dima Jeha, Joseph Mansour, Lana O'Son, Shady Saikali, RandaSheaib

Third year medical students at Gilbert and Rose-Marie school of Medicine, Lebanese American University in training at University Medical Center Rizk Hospital

Abstract

Objectives: The purpose of this observational study is to assess the current healthcare experience of the elderly population in Lebanon and how it differs by mode of insurance. This difference was based on the patient's accessibility to healthcare and financial aspect of their insurance.

 Methods: Methods used included both an in-depth interview with an expert in the field and data collection using questionnaires administered to 131 hospital patients above the age of 65.

Results: Data analysis showed that the majority of RHUH patients chose the hospital due to insurance restrictions as opposed to UMC-RH and CHN where the hospital choice was based on quality of care and doctors' recommendations. The data also showed a difference in approval time: MOPH was the only insurance in which 6% of the cases had to wait more than a week, and the private insurance group waiting less than a day in 89% of the cases. Analysis of time-to-hospitalization after referral showed that the MOPH was the only class in which patients had to wait for more than day. Despite these differences the majority was either satisfied or very satisfied, irrespective of the type of insurance, and 74.8% of the sample reported the ease of admittance to be "easy."As for the mode of payment for chronic medication, the majority of the patients covered by NSSF and SSIS & CPSE are able to recoup the cost of their medications from their insurance, while those covered by MOPH and Private insurance paid out-of-pocket.

Conclusion: As the elderly population in Lebanon grows and ages, a proper healthcare system will become more and more necessary to ensure the health of the entire people. There needs to be a comprehensive healthcare plan that all citizens can benefit from. The healthcare plan at least should include preventive care, and cover hospital stay and chronic medications regardless of age and socioeconomic status.