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Editorial

Dr Abdul Abyad
Chief Editor

This is the first issue this year. The journal has achieved major improvement in terms of the status and visibility in the Region and the World.

A paper from Libya reviewed the challenge of ageing of the population. The ageing of the population is an international trend, predictable to have extensive and noteworthy societal, financial and infrastructure implications. Old age and elderly are often associated with physical incapacity, functional limitations, biological deterioration, disabilities and psychological stressors namely bereavement and dependency. Elderly people in Western Industrialized countries are enduring healthier and wealthier throughout early old age than ever beforeIn the Arab countries and the developing world, the care of the elderly is behind and therefore we need to lay the foundation to ensure adequate health care system response to the needs of the elderly.

A prospective study was conducted at Queen Alia Hospital in a one year period from September 2011 through September 2012 investigating ocular disorders in elderly population. Ophthalmologic examination included Snellen's visual acuity, slit lamp examination, applanation tonometry and fundus examination. A total number of 780 patients were included in the study. Age range was 60 years to 92.7 years. The most common presenting complaint was poor vision due to lens opacity. Other common abnormalities were presbyopia, diabetic retinopathy, glaucoma and macular degeneration. The authors concluded that reduced vision is the commonest ocular complaint of elderly population which could be attributed to different ocular abnormalities. The majority of these abnormalities are treatable.

A prospective study from Jerusalem assessed the influence of oral health promotion program on oral health outcomes among independent elderly. The study was performed among 71 elderly in a geriatric day center, and nursing home. At baseline, both groups received an oral hygiene presentation. Individual interview and dental examination were performed. At baseline, 78% demonstrated good oral hygiene, 65% had high levels of bacterial biofilm, and 43% demonstrated severe chronic periodontitis. After six months, 86% demonstrated good oral hygiene ($p<0.001$), 46% had high levels of bacterial biofilm ($p<0.001$), and 20% demonstrated severe chronic periodontitis, ($p=0.003$). The authors concluded that the current program emphasized the importance of a simple and low cost oral health promotion program aimed at self-supported elderly.

A case control study from Iraq looked at nutritional assessment of hospitalized elderly diabetic patients . Nutritional assessment is an integral part of diabetes management and self-care education. The authors involved elderly patients aged ?60 years; fifty diabetic patients were compared with 50 non-diabetics patients admitted for other reasons. Nutritional status was investigated using Mini Nutritional Assessment -Short Form questionnaire scale, and anthropometric measures. The mean BMI for hospitalized diabetics was 26±5.8 Kg/m2, malnutrition was higher among diabetics (58%) diabetics, with odds ratio of 27.4. The odds ratio of elderly diabetics for severely decreased eating was 5.1, loss of > 3kg 16.7, bed or chair bound 9.3 and for move inside home 3.2. The authors concluded that hospitalized elderly diabetics were more susceptible to malnutrition and its risk factors than non-diabetics.

A case report from Cairo presents an interesting story of pelvic pain in a 58 year old Egyptian female that took too many turns starting with the diagnosis of vaginal atrophy and going through a diversity of investigations and just before the patient's death wishes were answered both she and her family found salvation. Chronic pelvic pain is a common problem and presents a major challenge to health care providers because of its unclear etiology, complex natural history, and poor response to therapy. Shedding light on different scenarios will definitely bring us closer to the pathophysiology of this problem. This case supports the fact that vulvodynia is difficult both to diagnose and manage given that it is considered as one of our differential diagnoses. The authors believe, in attempting to understand and disseminate the knowledge regarding this illness, every case is worth reporting.

A case report from Amman report on a patient with Basal cell carcinoma with perineural invasion. Perineural invasion of skin tumor was first mentioned by Cruvellier in 1835. Perineural invasion is an important mode of tumor spread and is associated with increased aggressiveness and a tendency for recurrence among cutaneous malignancies. A leading question of history of skin cancer in suspicious cases along with neurological examination is important in detecting some cases of skin cancer with perineural invasion. Magnetic resonance is the preferred imaging method of the evaluation of head and neck perineural tumor spread.

Original Contribution/Clinical Investigation

Nutritional Assessment of Hospitalized Elderly Diabetic Patients In Tikrit, Iraq: A Case-Control Study

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ABSTRACT

Background: Nutritional assessment is an integral part of diabetes management and self-care education. The aim of the study was to assess the nutritional status of hospitalized elderly diabetic patients and associated risk factors.

Methods: A case-control study done in Tikrit Teaching Hospital, Tikrit city, Iraq, involved elderly patients aged > 60 years; fifty diabetic patients (25 males and 25 females) were compared with 50 non-diabetic patients admitted for other reasons. Nutritional status was investigated using Mini Nutritional Assessment -Short Form questionnaire scale, and anthropometric measures.

Results: The mean BMI for hospitalized diabetics was 26±5.8 Kg/m2, malnutrition was higher among diabetics (58%) diabetics, with odds ratio of 27.4. The odds ratio of elderly diabetics for severely decreased eating was 5.1, loss of > 3kg 16.7, bed or chair bound 9.3 and for move inside home 3.2.

Conclusion: Hospitalized elderly diabetics were more susceptible to malnutrition and its risk factors than non-diabetics

Key words: Elderly diabetics, hospitalized elderly, nutritional status

Introduction

Diabetes Mellitus (DM) is an important chronic disease in terms of the number of persons affected and the associated morbidity and early mortality (1). While type 2 DM traditionally has been thought to affect individuals older than 40 years, virtually all cases of DM in older individuals are type 2. DM is said to occur in up to 18% of the population aged 65 and over, and is slightly more common in older women than men (2).

Insulin resistance and obesity are among several physiological changes associated with ageing that predispose to the development of DM (3). In contrast, it has also been shown that there is a high prevalence of malnutrition in the elderly, especially with regards to long-term care and hospital settings (4). The impact of malnutrition could be more deleterious in elderly patients with diabetes if nutritional counseling is poor (5).

Elderly people with DM share many of the nutritional problems of older people with chronic diseases, but they do have a nutritional deficiency which is specific and related to the disease itself, apart from low vitamin C levels which are a common finding (6). Insulin deficiency is very similar to malnutrition. Both are catabolic states that lead to increased cell turnover, and subsequent demand for nutrients, vitamins and minerals (2).

Deterioration of the nutritional status affects and is affected by disease, especially among the elderly (7).

Despite all that is known about DM, little is known about the nutritional status of older people with DM. Many articles are published on the role of diet in the management of people with diabetes, but most studies focus on the middle aged patients. There is increasing evidence to suggest that DM has a different presentation, complication rate, and management (including the role of dietary therapy) in the hospitalized elderly populations (2).

For the previously mentioned reasons there's a need to study the nutritional status of the hospitalized diabetic elderly. This study aimed to assess the nutritional status of hospitalized elderly diabetic patients, to find out the associated risk factors of malnutrition.

Methods

Study design and setting

This is a Case-control study, carried out from 1st November, 2009 to 1st July, 2010, in Tikrit Teaching Hospital that covers Tikrit city population (159721) and has 473 beds in different specialization of which 71 beds are in internal medicine department.

Subjects

Patients aged 60 years or more and who stayed in the hospital for one or more days, excluding new CVA cases or malignant diseases.

1. **Cases:** Elderly in-patients having DM for more than 1 year depending on the medical history and the venous fasting plasma glucose (FPG) of ≥ 7.0 mmol /1 (1).
2. **Controls:** Elderly patients admitted to Tikrit Teaching Hospital, department of medicine, without DM, and without new CVA or malignancy (1).

Sample size and sampling method

A convenience sampling method was used. Twenty five female and 25 male diabetic patients were compared with the same number of controls (25 males, and 25 females).

Data collection

Data collection was done in the first 24-72 hours of admission by direct interview of the patient or patient's caregiver (if the patient had dementia or some other problem that prevented communication):

1. The Mini Nutritional Assessment-Short form (MNA-SF) questionnaire scale (0-14) (8) was used for the assessment of the nutritional status, scores ≤ 7 defined as malnutrition, 8-11 scores as at risk of malnutrition which need further assessment, and ≥ 12 defined as well nutritional status.

2. **Weight:** was measured in (kg) using UNICEF electronic scale. Shoes and heavy outer clothing of the subjects was removed.

3. **Height:** The height in (m) was measured by a measuring tape which was hammered on to the wall stadiometer. Height was measured without shoes. If the patient was bedridden, or unable to stand, height was measured using the demi-span (half arm span), according to the method used by Hickson and Forst (9).

   The arm was flat and wrist was straight. The height was calculated by the following formula:

   Females height in cm = (1.35 x demispan in cm) + 60.1
   Males height in cm = (1.40 x demispan in cm) + 57.8

   From these measurements, the Body Mass Index (BMI) was calculated, as follows: Weight (kg.) / Height (m).

4. **Calf Circumference (CC):** The CC was measured while the subject was sitting with the left leg hanging loosely or standing with their weight evenly distributed on both feet with uncovered calf. The tape was then wrapped around the calf at the widest part, for recording. Calf circumference <31 cm was considered as malnutrition (5).

5. **Fasting plasma glucose (FPG):** Venous plasma glucose was used for measuring glucose concentrations in blood (1).

The study was approved by the research ethics committee of the College of Medicine of Hawler Medical University and verbal informed consent was obtained from each participant or his/ her guardian if the patient had dementia.

Statistical analysis and data management

The Statistical Package for Social Sciences (SPSS, version 10) was used for data entry and analysis. Chi ($_{\chi}2$) square test, and unpaired Student t test, was used for comparing groups of data. P value of ≤ 0.05 was regarded as statistically significant.

Results

Characteristics	Cases				Controls				t, p value
	No.	Mean	S. D	S. E	No.	Mean	S. D	S. E	
Age	50	67.4	7.3	1.0	50	67.2	7.1	1.0	0.180, 0.858
BMI	48	26.0	5.8	0.8	46	26.5	4.1	0.6	-0.499, 0.619
Calf circumference (CC) in cm	50	31.4	4.2	0.6	50	31.6	3.6	0.5	-0.325 0.746
Duration of diabetes (years)	50	11.1	8.4	1.2	0	.	.	.	
Fasting blood glucose	50	9.6	4.4	0.6	50	4.6	0.9	0.1	7.872, <0.001
MNA Scores	50	7.3	2.5	0.4	50	9.9	2.1	0.3	- 5.768, <0.001

Age: age in years, BMI: body mass index , Cc: calf circumference measured in cm, Duration of diabetes: years of disease , Fasting blood glucose : in mmol / l, MNA: Mini Nutritional Assessment scores

Table 1: The means of the main characteristics among cases and controls

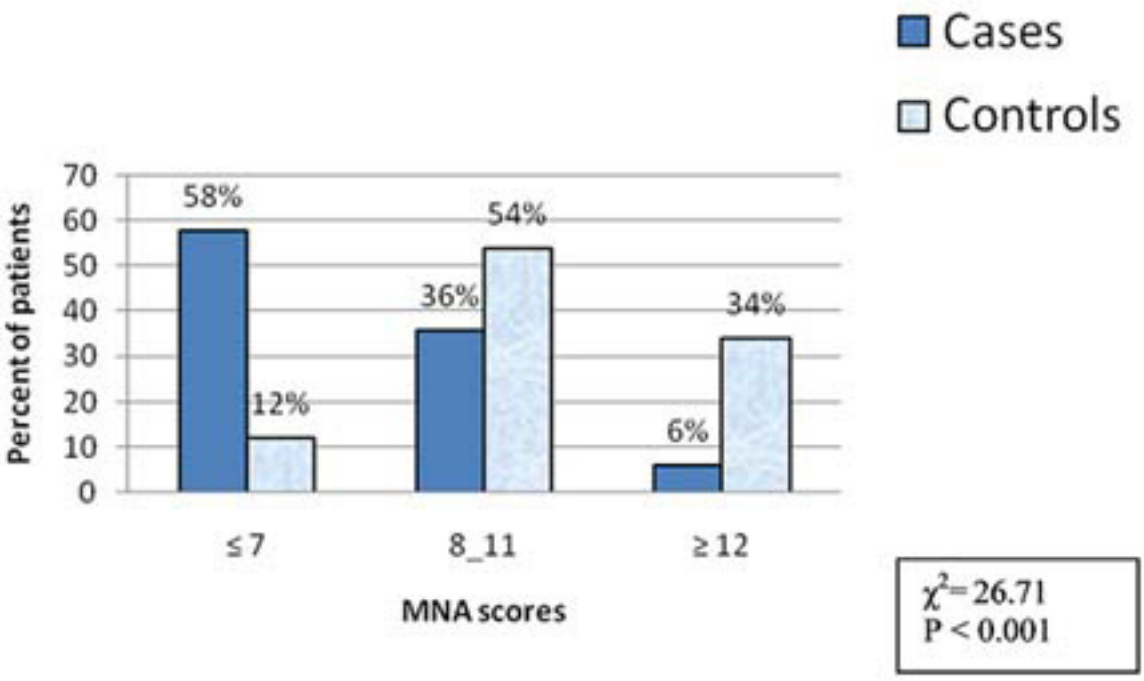

Figure 1: Nutritional status by MNA scores of the elderly diabetic and non-diabetic population.

The age range was 60-87 years with a mean of 67.4±7.3 for diabetic group and 67.2±7.1 for non-diabetic group. The mean fasting blood glucose levels were 9.6±4.4, and 4.6 ±0.9 mmol/ L for diabetics and non-diabetics, respectively; this variation is statistically significant (t=7.872, df= 98, P < 0.001,), and the mean MNA scores were 7.3 ± 2.5 and 9.9± 2.1 for diabetic and non-diabetic group, respectively. This variation is statistically significant (t= -5.768, df= 98, P < 0.001,), as shown in Table 1. This study revealed that 58% of diabetic patients have malnutrition (<7 scores) in comparison to 12% of the non-diabetic group; proportion of at risk of malnutrition (8-11 scores) among diabetics was 36 % in comparison to 54% for non-diabetics. This variation is statistically significant ($_x$2= 26.71, df =2, P < 0.001), as shown in Figure 1.

Diabetics had 27.39 fold risks to get scores ≤ 7, and 3.8 to get scores 8-11, as shown in Table 2. Severely decreased eating in the last 3 months was reported among 32% of the diabetic group, in comparison to 12% of the non-diabetic group, with odds ratio 5.1. This difference is statistically significant (P= 0.005). Loss of weight (>3Kg) in the last 3 months was found in 50% of the diabetic group in comparison to 10% of the non-diabetic group, with odds ratio of 16.7 times to loss of weight > 3 Kg. This variation is statistically significant (P< 0.001), as shown in Table 2 (next page).

Results showed that 18% of the diabetic group versus 4% of the non-diabetic group were bed or chair bound with odds ratio of 9.3, statistically significant (P = 0.004), and 52% of the

Variables	Diabetics	Non diabetics	OR	95% Confidence Interval	P value
	No(%)	No.(%)			
MNA score					
≤ 7	29 (58)	6 (12)	27.39	6.1-123.9	< 0.001
8_12	18 (36)	27 (54)	3.8	0.96-14.8	0.005
≥12	3 (6)	17 (34)	1**		
Decreased eating					
None	12(22)	23 (46)	1**		
Severe	16 (32)	6 (12)	5.1	1.6-16.5	0.005
Moderate	22(44)	21 (42)	2.008	0.8-5.03	0.135
Loss of weight					
No weight loss	6 (12)	20 (40)	1**		
Weight loss greater than 3 kg	25 (50)	5 (10)	16.7	4.4-62.7	< 0.001
Does not know	17 (34)	14 (28)	4.04	1.3-12.8	0.015
Weight loss between 1 and 3 kg	2 (4)	11 (22)	0.6	0.1-0.5	0.456*
Mobility					
Bed or chair bound	9 (18)	2 (4)	9.3	1.8-48.9	0.004*
Able to get of bed / chair but does not go out	26 (52)	17 (34)	3.2	1.3-7.5	0.008
Can go out	15 (30)	31 (62)	1**		
Neuropsychological problems					
No neuropsychological problems	46 (92)	47 (94)	1**		
Mild dementia	4 (8)	3 (6)	1.4	0.3-6.4	0.5*
Psychological stress or acute disease					
No Psychological stress	19 (38)	23 (46)	1**		
Has suffered Psychological stress or acute disease in the past 3 months?	31 (62)	27 (54)	1.4	0.6-3.1	0.418

* Fisher exact test, ** Reference case

Table 2: The odds ratio for diabetic patients in relation to other variables

diabetic group in comparison to 34% of non-diabetic group were able to get out of bed / chair but not go out, with odds ratio of 3.2, statistically significant (P = 0.008).

Neuropsychological problems were found in 8% of diabetics who had mild dementia in comparison to 6% of non-diabetics, with odds ratio of 1.4.

Thirty one (62%) cases, versus 54% controls suffered psychological stress or acute illness in the past 3 months with odds ratio of 1.4.

Discussion

As a high proportion of elderly are undernourished on admission, further deterioration often occurs during their inpatient stay; routine screening of nutritional state is therefore recommended in all patients admitted to hospital to allow early intervention (10).

The finding of non-significant variations in the anthropometric measures, while a statistically significant difference in terms of MNA scores, goes with that of Turnbull in UK (11) who had a similar finding and explained it by that MNA is an overall nutritional assessment, encompassing all areas of nutritional evaluation.

This study revealed that of hospitalized diabetics 58% are at greater risk of development of malnutrition than the non-diabetic group, with OR (27.39) to develop malnutrition (MNA scores ≤ 7) which is supported by that found in the UK (11). This significant variation may be explained by the following reasons: DM is a chronic debilitating disease; most hospitalized diabetics have uncontrolled DM, associated with complications, which in turn causes malnutrition, dietary restriction (12), metformin, a frequently used antihyperglycemic drug caused anorexia (13).

In this study diabetic patients were 5.1 times more exposed to severe decreased eating than non-diabetics, and about 32% of diabetics had significantly decreased their eating severely. This finding was a little higher than what was found in Brazil where 29.2% of hospitalized patients had severely decreased eating (14). This difference is attributed to the fact that hospitalized diabetics already have decreased food intake of less than 50% of their calculated maintenance energy requirements (15).

Decreased eating in diabetic patients may be due to the following: deterioration in senses of taste and smell with age, anorexia of aging, slow gastric emptying, diminished dispensability of the stomach, lean body mass and the decreased basal metabolic rate, poor dentition and ill-fitting dentures, both with the related complications that are common in the elderly, and multiple medications (7); all these were worsened by diabetes.

In the present study, 50% of the diabetic group had lost >3Kg, which is higher than that of non-diabetics 10%. In a study on hospitalized Brazilians in general 34.6% had lost >3Kg (14). The higher figure revealed by this study could be attributed to the fact that it was done on diabetics, which is further corroborated by the finding that diabetic patients are subjected 16.7 times to loss of weight > 3Kg than non-diabetics.

The unintentional weight loss among the elderly may have resulted from; psychiatric disorder, gastrointestinal diseases, endocrine disorders, cardiovascular disease, nutritional disorders, respiratory disease, neurological disorders, chronic infection, and renal disease (16), delirium, dementia, depression, taste difficulty, swallowing difficulty, digestion problem, pain, mouth infection, chewing difficulty, and a longer hospital stay, and diabetics usually had most of these factors as a complication (17). Thirty four percent of diabetics and (28%) of non-diabetics didn't know their weight loss in the last 3 months, although knowledge of weight loss is important because weight loss is one of the best indicators of poor outcome and nutritional risk in geriatric management. This may result from absence of health educational programs in all community levels and neglect of health education regarding geriatric disease management and monitoring by the health staff and physicians.
Functional disability was significantly found in diabetics as (18%) of them were bed or chair bound; this figure is near to that found in Brazil (14) (21.7%); in Canada, (25%) had severe joint limitations(18).
About 52% of the diabetic group was able to get out of bed / chair but do not go out; this result was higher than that reported in Brazil (14) (12.5%). In Canada, (45%) of diabetics had joint limitations (18). This high proportion could be explained by absence of physical activity among the elderly people in Iraqi society.

The significantly severe functional impairment among the diabetic group, with OR 9.3 to be bed or chair bound, was supported by that found in the UK there was a significantly severe functional impairment (OR 2.1for mobility limitation) than non-diabetics (19).

This can be explained by loss of leg muscle strength and quality (20), joint limitations, and more comorbidities (18) frequently found in elderly diabetics.

Mild dementia was found in (8%) of the diabetic group, and this is lower than what was found in Brazil (11.7%) (14). This difference may be due to cultural and sampling differences, and availability of geriatric health care services. Diabetic patients are 1.4 times at risk of developing dementia, and this result is nearly equal to what was found in Rotterdam; odds ratio of diabetics to develop dementia was 1.3. This is also supported by the fact that diabetic patients are consistently associated with a 2.0- to 2.6-fold increase in risk of incident vascular dementia (21), the accelerating rate of decline in cognitive function in elderly diabetics (22), and the fact that DM and its co-morbidities is also a strong risk factor for dementia (23).

Sixty two percent of the diabetics suffered from psychological stress or acute illness in the past 3 months. This value is near to that found in Istanbul (61%) (24). This study revealed that diabetics are at 1.4 times higher risk of depression, which is supported by that found in Canada OR 1.6 (25).

This may be explained by the fact that depression is a common problem in older people (26) and diabetics are twice as likely to suffer from depression compared with the general population (27). Depression usually causes malnutrition by causing lack of appetite, loss of interest in self-care, apathy, physical weakness, and possibly, laxative abuse (28).

Conclusion

The proportion of malnutrition measured by MNA-SF tool was higher among hospitalized diabetics (58%) than non-diabetics, with odd ratio 27.4. The MNA-SF tool was better for nutritional status assessment than anthropometric measures among hospitalized elderly patients. The common risk factors associated with malnutrition among the diabetic elderly were: decreased eating, loss of weight, and mobility limitations. Routine screening of nutritional state is recommended for all patients admitted to hospital to allow early intervention on admission, before further deterioration occurrence during their inpatient stay, especially among diabetics. MNA-SF is recommended in nutritional assessment of elderly diabetics and this can be done by the nursing staff.

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Original Contribution/Clinical Investigation

Ocular Disorders in the Elderly Population

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ABSTRACT

Objectives: The aim of the study is to investigate ocular disorders in the elderly population.

Patients and methods: This is a prospective study that was conducted at Queen Alia Hospital in a one year period from September 2011 through to September 2012. All patients aged 60 years and above attending the ophthalmology clinic for various reasons were included in the study. Ophthalmologic examination included Snellen's visual acuity, slit lamp examination, applanation tonometry and fundus examination.

Results: A total number of 780 patients were included in the study. Males outnumbered females with a ratio of 1.2 to 1. Age range was 60 years to 92.7 years (mean 66.4 years). The most common presenting complaint was poor vision due to lens opacity. Other common abnormalities were presbyopia, diabetic retinopathy, glaucoma and macular degeneration.

Conclusion: Reduced vision is the commonest ocular complaint of the elderly population which could be attributed to different ocular abnormalities. The majority of these abnormalities are treatable.

Introduction

Geriatric patients are a group who need special care and treatment. They have more risk of developing medical problems than the adult population. With advance in age, they will need help from their families or social workers to be able to do their daily activities. The presence of good vision will help them in managing their own life (1-2). In western countries, the life expectancy is higher than our countries. So most of the studies done in literature about ocular pathologies in the elderly population highlight different pathology than in our countries as there are certain diseases that become more prevalent with advance in age such as age related macular degeneration which is the most common cause of vision loss in western world (3-6). In addition, the presence of well established screening programs by general practitioners for certain disorders such as diabetic eye disease in western communities makes some pathology like diabetic retinopathy less than what is seen in our communities (7-8).

The aim of our study was to investigate ocular disease in patients aged over 60 years to see whether these diseases can be treatable

Patients and Methods

This is a prospective study that was conducted at Queen Alia Hospital in a one year period from September 2011 through September 2012. All patients aged 60 years and above attending ophthalmology clinic for various reasons were included in the study. History was obtained from all patients. Ophthalmologic examination included Snellen's best corrected visual acuity, slit lamp anterior segment examination, Goldmann's applanation tonometry and fundus examination by +78 lens. Blind patients with best corrected visual acuity of less than 3/60 in the better eye were identified and cause of blindness was recorded.

Results

A total number of 780 patients were included in the study. Males outnumbered females with a ratio of 1.2 to 1. Age range was 60 years to 92.7 years (mean 66.4 years). The most common presenting complaint was poor vision due to lens opacity (60.5%). Other common abnormalities were presbyopia, diabetic retinopathy, glaucoma and macular degeneration (Table 1 - top of next page).

Disease	Number of patients	Percentage
Cataract	472	60.5%
Age related macular degeneration	37	4.7%
Diabetic eye disease	117	15%
Glaucoma	19	2.4%
Refractive error	61	7.8%
Corneal pathology	7	0.9%
Uveitis	4	0.5%
Retinal pathology *	9	1.2%
Optic nerve pathology/ nerve palsies	13	1.7%
Lid pathology	7	0.9%
Conjunctiva pathology	11	1.4%
Mixed pathology	23	2.9%
* Other than diabetic retinopathy and age related macular degeneration, examples are myopic degeneration, macular hole, vein occlusion and retinal detachment		

Table 1: Ocular Pathology

Cause	Number of patients
Cataract	16
Age related macular degeneration	7
Glaucoma	4
Diabetic retinopathy	4
Total	31

Table 2: Causes of blindness

Blindness with best corrected visual acuity of less than 3/60 in the better eye was seen in 31 patients (4%). Causes of blindness were cataract (16 patients), age related macular degeneration (7 patients), glaucoma and diabetic retinopathy (4 patients each). Table 2 shows causes of blindness.

Discussion

The World Health Organization defines blindness as visual acuity of less than 3/60 in the better eye (9). We used this definition in order to identify cases of blindness in our group. Blindness is a serious handicap in the elderly population as many of these people have medical illnesses and skeletal problems that render them dependent on other family members or social workers. In addition to increasing dependence on other people and inability to do daily activity, blindness has social and psychological impacts on elderly people(10-11). In western communities, due to high life expectancy, many causes of blindness are attributed to age related macular degeneration which is reported to occur in 29% of elderly people (12-13). In our study, 4.7% of elderly patients attending the ophthalmology clinic had age related macular degeneration. This low figure is attributed mainly to poor life expectancy in our communities compared to the western world.

The most common presenting problem in the geriatric age group to the ophthalmology clinic in our study was attributed to lens opacity. Four hundred and seventy two patients (60.5%) presented with poor vision due to lens opacity. Only 16 of them were legally blind according to WHO definition of blindness. Fortunately, causes of blindness attributed to cataract are reversible (14). Therefore, appropriate treatment of this category of patients will result in better quality of life for them. In the western world, cataract is the second commonest cause of visual impairment preceded by age related macular degeneration (14-15). Other causes of blindness found in our study were age related macular degeneration (97 patients), glaucoma and diabetic retinopathy (4 patients each).

Diabetic eye disease was the second leading cause of presentation to the ophthalmology clinic (15% of patients). In our practice, we find many cases of advanced diabetic eye disease. This is attributed to lack of knowledge among diabetic patients about the importance of routine eye examination and absence of community screening programs. In western communities, the figures are much less due to presence of screening programs done by general practitioners (16). Refractive error and presbyopia are also relatively common problems for elderly people in our practice. Table 2 shows other presentations of elderly patients to the ophthalmology clinic. Examples are lid

and conjunctival diseases, corneal degenerations, Uveitis, optic nerve pathology such as ischemic optic neuropathy, retinal vein occlusion, retinal detachment and cranial nerve palsies causing external ophtalmolpegia.

In conclusion, reduced vision is the commonest ocular complaint of the elderly population which could be attributed to different ocular abnormalities. The majority of these abnormalities are treatable.

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Original Contribution/Clinical Investigation

Intervention Plan for Improving Oral Health among the Elderly residing in the Community and in a Nursing Home

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ABSTRACT

Objectives: To assess the influence of an oral health promotion program on oral health outcomes among independent elderly.

Methods: A prospective study was performed among 71 elderly in a geriatric day center, and nursing home. At baseline, both groups received an oral hygiene presentation. Individual interview and dental examinations were performed. Each of the participants received oral hygiene instructions accompanied by written oral hygiene guidelines. After six months, the same questionnaire and oral examination were performed.

Results: At baseline, 78% demonstrated good oral hygiene, 65% had high levels of bacterial biofilm, and 43% demonstrated severe chronic periodontitis. After six months, 86% demonstrated good oral hygiene ($p<0.001$), 46% had high levels of bacterial biofilm ($p<0.001$), and 20% demonstrated severe chronic periodontitis, ($p=0.003$). No statistical differences were revealed between the geriatric day center and nursing home groups.

Conclusions: The current program emphasized the importance of a simple and low cost oral health promotion program aimed at self-supported elderly.

Key words: oral hygiene; educational intervention; oral health; elderly.

Introduction

The mouth and face are considerable factors in the physical, psychological, and social well-being of people [1-3]. Theoretical explanations related to the effect of oral health on the quality of life have been well documented in the literature [4-5]. As age increases, dental, periodontal and general medical health often concurrently deteriorate [6], and a proved association between oral diseases, socio-economic status and behavioral risk factors was examined [1].

As part of ageing, many expected physiological and psychosocial changes influence the ability to maintain oral hygiene [7]. Subsequently general health is impaired and a relationship had been found between oral health and diabetes, cardiovascular diseases, and respiratory diseases such as aspiration pneumonia [7]. A common approach emphasizes the importance of reduction in periodontal infection burden to improve general health [8].

Studies and attention were given to effectiveness of oral health promotion among the elderly, including health care education, oral hygiene instructions, and behavioral training. The studies measured levels of oral hygiene, dental plaque, levels of caries, and periodontal health [9-10]. Few studies have reported changes in oral health knowledge, attitude and behavior [10].

The current study aimed to assess changes due to an educational intervention program in dental caries, gingival health, periodontal pocket depth, plaque levels and behavioral changes among self-reliant elderly population in the community and nursing home dwelling populations.

Methods

The protocol of this study was approved by the Hadassah IRB ("Helsinki") committee. Two different populations of self supporting elderly in Jerusalem were identified. The first group lives in a nursing-home and the second group live in their home and attending a day center, taking part regularly in classes and activities.

At baseline, a 30 minute presentation was prepared and presented to both groups. The presentation included basic information on the harmful results of dental caries and periodontal disease, while emphasizing the bacterial nature of these two dental diseases and the presence of dental plaque. The presentation also included details on the side effects of medication that are relevant to the oral environment, and other oral pathologies including cancer and the adverse effect of dental disease, especially periodontitis, on systemic diseases, were mentioned. The final part of the presentation included detailed instructions for oral hygiene with some emphasis on denture hygiene.

In addition, each of the participants was interviewed by one of two calibrated investigators. Sociodemographic and socioeconomic data were gathered. In addition, they were asked about their general well-being, level of daily activity, social interaction and oral hygiene habits.

Following, all participants had dental clinical examination including dental caries, missing teeth, type of restorations, and periodontal status (Community Periodontal Index-CPI). The CPI was employed as recommended by the WHO [11]. This index scale is nominal and ordinal: 0=health; 1=bleeding; 2=calculus; 3="shallow" periodontal pocket of 4-5mm; 4="deep" periodontal pocket above 6mm. The CPI examines index teeth (six surfaces of each tooth), and for each sextant the worst score is recorded. Severe Chronic Periodontitis (SCP) was operationally defined as having at least one pocket depth of six millimeters or more (CPI score = 4). In addition, presence of bacterial biofilm and the ultimate outcome of oral hygiene were assessed according to the Plaque Index of Silness and Löe [12]. The index is calculated by summing the average scores for each tooth and dividing by the number of teeth assessed. After six months, the same questionnaire and oral examination were performed. The statistical processing utilized SPSS 19.0. Chi-square test with level of significance of $p<0.05$ was chosen.

Results

Seventy one participants were examined at baseline with a mean age of 78.92±7.9 yrs. Males were older than females ($p=0.031$). Subjects' demographics and socioeconomic characteristics are presented in Table 1 (next page). Regarding dentition status in the upper jaw, 32 out of 71 were edentulous. A complete dentition was recorded among 12 participants and 27 demonstrated partial dentition. In average, 9.0±6.1 teeth were missing. In the lower jaw, 25 out of 71 were edentulous. A complete dentition was recorded among 15 participants and 31 demonstrated partial dentition. On average, 8.7±6.7 teeth were missing.

With regards to oral hygiene maintenance (teeth and dentures), 78% of study participants demonstrated good oral hygiene habits. Accumulation of dental plaque and calculus was presented among 65% of the participants. All of the elderly demonstrated a CPI worst score of 1 and above, with deep periodontal pockets (CPI score 4) among 43%.

After six months, 50 of the elderly were re-examined. Statistically significant findings are presented in Table 2. This included good oral hygiene habits (86%, $p<0.001$), accumulation of dental plaque and calculus (46%, $p<0.001$) and deep periodontal pockets (severe chronic periodontitis) (20%, $p=0.003$). Results were adjusted for age, gender, marital status, place of residence, education and income.

Discussion

Compromised oral health and chronic oral diseases influences the elderly's nutrition, systemic resistance against pathogens and thus their general wellbeing [13-15]. Studies have reported minor success in achieving meaningful results of oral health promotion by educational intervention [16]; other studies achieved a favorable outcome by shifting the responsibility for good oral hygiene and oral care from the elderly to a care giver, nursing home staff or a dental hygienist [17-18]. Educating elderly with regards to oral hygiene might lead to improvement in oral disease indicators and may be the most cost-effective intervention. In addition, oral disease prevention might be cheaper than even the most basic dental treatment [19]. According to this study, our preliminary results indicate that an intervention plan has the potential to improve oral health outcomes among elderly residing in the community and in

		N	%
Gender	Male	10	14.0
	Female	61	86.0
Residence	Community	40	56.3
	Nursing home	31	43.7
Marital status	Widowed	40	56.4
	Married	25	35.2
Residence with partner	Live alone	30	42.2
	Live with family member	41	57.5
Education	High school education and higher	38	53.5
	Elementary school education or none	33	46.5
Source of income	Social security allowance	27	38.0
	Social security allowance and supplementary pension or allowance	44	62.0
Smoking	Never smoked	55	77.5
	Smoking or past smoking	15	22.5

Table 1: Study population demographic and socioeconomic data

	Baseline	Six months	*p*-value (Chi-square)
Good habits for maintaining oral hygiene	78%	86%	p<0.001
Accumulation of biofilm or calculus	65%	46%	p<0.001
Severe Chronic Periodontitis	43%	20%	p=0.003

Table 2: Baseline and six months dental examination findings among study participants

nursing homes. A significant improvement was revealed in oral hygiene habits, level of plaque, and deep periodontal pockets.

While oral screening is traditionally dealt with by the dental team, a well informed geriatric physician might consider including in a routine medical health examination, an observation of oral health and oral hygiene. In the process of mouth and throat examination, inquiry of oral function, dental pain, swelling, spontaneous bleeding, redness, ulcers and tooth distraction and food consumption problems is recommended. Presence of alarming findings may indicate a need for further examination by a geriatric dentist.

The current simple and low cost educational programs research emphasized the importance of an oral health promotion program aimed at self-supported elderly. Further longitudinal studies are needed in order to assess long term influences with regards to the elderly health, general well-being and quality of life.

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Elderly situation in Libya, the challenge

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ABSTRACT

Examining the challenges of ageing in place

The ageing of the population is an international trend, predicted to have extensive and noteworthy societal, financial and infrastructure implications. Old age and elderly are often associated with physical incapacity, functional limitations, biological deterioration, disabilities and psychological stressors namely bereavement and dependency.

The UN has accorded policies on ageing and health (Gerontology) since the mid-1970s. Eight years later, the General Assembly agreed resolution 33/52 concerning the organization of the World Assembly on the Elderly, with a vision to the formulate an international plan for accomplishment on ageing which would call for the needs of elderly with a response to their demands. The world assembly on aging took place in Vienna in 1982 and was the first international instrument on ageing, and has addressed three main points to be considered and to be taken into consideration; namely the sustainability of expansion in a world where the population is increasing in age, the upholding of good health and well-being to an advanced age; and the establishment of a suitable and compassionate atmosphere for all age groups. Each of the three points should cover health and nutrition, the safeguarding of elderly consumers, housing and environment, the family, social welfare, income security and employment and training and education.

Elderly people in Western Industrialised countries are becoming healthier and wealthier throughout early old age than ever before. The concept of a person's life span to 100 years of age these days is less a science fiction tale and more of sustained efficiency, productivity, planning and long term prerequisites. Elderly on the other hand in the developing countries are still laid back. A condition of a transitional state in a lively progression namely frailty has been described to decide aging process speed, during which the total physiological reserves diminish and become less likely to be adequate for the preservation and restoration of the ageing body. It has been described to be a collective entity of clinical syndromes and a progressive latent phase. It is aging with a buildup, due to lack of physical exercise, insufficient nourishment, damaging environment, injuries, disease and drugs. In the Arab countries and developing world, the geriatric health care system is still lacking and therefore we need to act and aim for healthy aging to ensure a healthy future.

Aging in the elderly: Chronological versus photoaging:

Some skin changes can be seen exclusively in the elderly. Skin is a window to aging changes, a biological reality. There is a dearth of studies regarding the various chronological (intrinsic) aging and photoaging (extrinsic).

The common skin changes due to chronological aging are thin skin, fine wrinkles, xerosis, and loss of elasticity. Photoaging changes such as dyspigmentation, freckles, thick skin, deep wrinkles, melasma, citrine skin, senile purpura, pseudostellate scar, acrokeratoelastoidosis marginalis, and lentigines. All vary however

according to geography, ethnicity, gender and many other factors. Smoking and prolonged sun exposure is the risk factors aggravating photoaging. The most common dermatosis in elderly is pruritus; such pruritus is usually associated with xerosis, as well as contact dermatitis which is more common in males. Fungal infections are frequently seen in females. Seborrhoeic keratosis is the most common benign neoplasm more commonly seen in males. Also older individuals are more prone to develop as well as die from cutaneous melanoma. Cutaneous malignancies depend on location and ethnicity as well.

Also the fact we cannot deny is the fact of comorbid medical conditions in many older individuals which burden the case due to the likelihood of multiple drugs intake and interactions.

Conclusion: Chronological changes are more frequent in females than males, while photoaging was more frequent in males.

The aim and prime objectives of this paper is to shed light on the elderly population trends in Libya, to examine the challenges faced in aging among Libyans, possible approaches for prevention of geriatric related problems and possibly advocating a policy framework and recommendations.

Demography change:
It has seen been noticed that there is a shift in the population pyramid across the whole world. However the majority of Libyan societies remain youth dominated, the size of the aging population is on the rise.

The population of the world is aging rapidly. It is currently estimated that more than half (58%) of all people who are 65 years and older live in the developing countries exclusively. The world's older population experiences a net increase of 1.2 million each month, 80% of which occurs in the third world nations. This will make enormous demands on the health care system if not seriously considered and appreciated.

Definitions:
Aging is a biological process. It is not a disease. In order to increase the populations' awareness of it, it is very vital to provide ready and correct information on the needs and abilities of the old people, ignoring of which has very critical implications.

Geriatric population is defined as population aged 60 years and above (WHO).

The phenomenon of population aging is defined as an increase in the median age of the population.

Libya
Libya is a very large country with a relatively small population, but the population is actually concentrated very narrowly along the coastal line.

The Libyan population pyramid:
The statistical calculation for Libyan demography takes place every 10 years and the last calculated one was in 2007. However estimation carried out by the CIA in July 2012 found that the general population has increased from 5 million to 6,733,620 million, including 166,510 non-nationals.

The aging structure between 0-14 years is 32.8% with males 1,104,590 and females 1,057,359, and the age structure between 15-64 years is 68.9% (males 2,124,053, females 2,011,226), and lastly age structure above 65 years and over is 4.6% (males 146,956, females 153,776).

So this would mean that the age group between 0-14 years has declined from 41.9% in 1950 to 30.4% in 2010, and the age group between 15-64 years has increased from 53.4% in the 50s to 65.3% in 2010. However the age group of 65 and above displayed different variations compared to the fifties. It was around 4.7% in 1950, then declined to reach around 2.2% in 1975 and 1980 consecutively and then displayed a slight increase to around 2.9% in 1995 and then reached again around 4.3% in 2010 (Figure 3 - page 19).

Also it has been noticed that the fertility rate in Libya has dropped to 2.9 children per mother in 2011, compared to 5.2 in 1990. Most of the fall happened in the 1990s, and median age currently is 24 years and rising. With its fairly young population, and increased life expectancy, Libya remains a country with a high rate for births compared to deaths of 7 births per death case. Figures shown that birth rate was 52.000 in the period between 1950-1955 and rose to 145.000 in 2005-2010, and the death rate was stable around 24.000 (Figure 4). So the population growth rate declined from 2.4% in 2000 and is now estimated to be 2.007% in 2011 (2011 estimate).

The health system in Libya is divided into three main categories;

Tertiary health care level includes the specialized hospitals like oncology in Sebratha, dermatology and cardiology in Tajoura, and pediatrics and gynecology and obstetrics in Tripoli, while, the Secondary health care levels, include general hospitals and rural Hospitals.

Lastly is the primary health care (PHC) which includes communicable disease centre (CDC) and the primary health care units and centres (Figure 5).

All of what has been stated does not show nor includes integration of geriatrics health care services (Figure 5 and 6).

Figure 1: Map of Libya

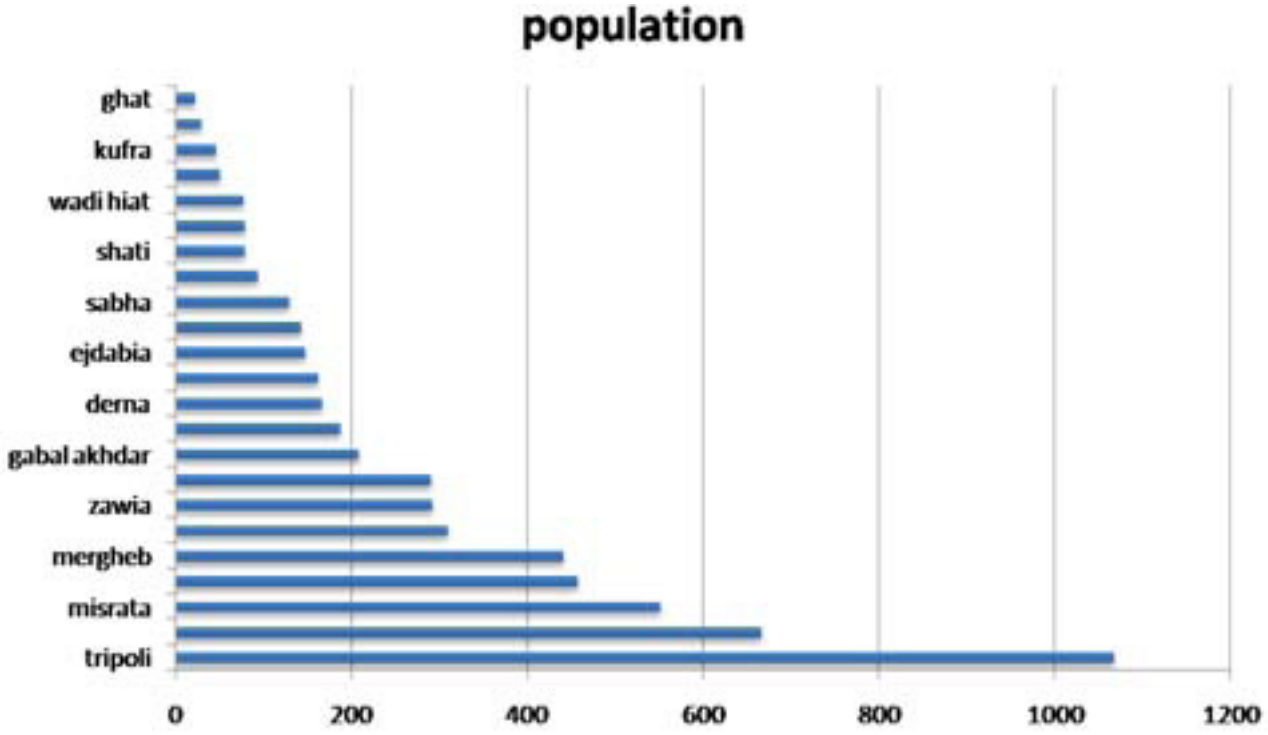


Figure 2: Population distribution in Libya

The health expenditure in Libya was 5.5% in 2007 which is comparatively very low in comparison to Tunisia (10.4) and the UK (15.1) and the out-of-pocket expenditure on health was 100%. In 2009 it was slightly increased to be 6.6 % of GDP. The physicians in Libya were estimated to be 1.9 per 1000 population (estimate 2009).

Old age is often associated with physical incapacity, functional limitations, biological deterioration, disabilities and psychological stressors namely bereavement and dependency, as well as non communicable diseases (NCDs) and obesity.etc. Thus a long life is costly with a high cost per episode (Figures 8 and 9).

Each age, gender, and ethnic group has distinctive characteristics, and the experience of aging differs among the demographic groups.

The cost of a long life is very high and demanding as the figures show. Also the cost per each episode is increasing as well (Figures 8 and 9).

Package of challenges related to aging

There are many deficiencies and challenges faced, for instance, there are shortages in some specialtieswhich includes geriatrics, or physicians trained in geriatrics.

Also, the curricula of basic and graduate level education lacks aging content.

The graduates of nursing schools are under-trained and poorly qualified

	Population aged 0–14 (%)	Population aged 15–64 (%)	Population aged 65+ (%)
1950	41.9	53.4	4.7
1955	43.0	52.7	4.3
1960	43.3	52.7	4.0
1965	43.4	53.0	3.6
1970	45.2	52.1	2.7
1975	46.5	51.3	2.2
1980	47.0	50.7	2.2
1985	47.3	50.5	2.3
1990	43.5	53.9	2.6
1995	38.3	58.8	2.9
2000	32.4	64.2	3.4
2005	30.6	65.6	3.8
2010	30.4	65.3	4.3

Figure 3: Population age group distribution across years

There is no training in the care of the elderly, and many do not find working with them to be rewarding.
There are poor health services with unmet expectations from the customers.
There are not any services for elderly with special needs (age-related disability benefits).
The public service provided is very poor and not well structured.
There are no proper social welfare services provided, in order to live a life of dignity.
Moreover the burden of NCDs (geriatrics syndromes) is tremendous.
Also all of which would mean a high cost of a long life.
Furthermore there is a lack of precise data due to the lack of data entry and computerized systems in place.
Lack of emergency hotlines for older persons.
No geriatric wards in hospitals.
No programmes to promote voluntary work, self-help and self-reliance.
Also there are social problems which would add more problems.
Also the diverse geographic variations would make a problem for accessibility and quality of services provided.
There is an inequity, citizens´rights issues.
Lack of collaboration with other sectors of the society.
Also the fact of declining morals would add to the burden of problems.

In short, there are no geriatric care services available for the elderly in Libya where life expectancy is increasing.

Life expectancy

The life expectancy would reflect the average life span a new born can expect. It is a better reflection of the success of a nation in the aging process.

The life expectancy is very short if there is a high child death. The total life expectancy in Libya is estimated to be

Period	Births	Deaths	Difference	CBR*	CDR*	NC*	IMR*	TFR*
1950–1955	52.000	24.000	28.000	48,0	22,5	25,5	185	6,87
1955–1960	60.000	25.000	35.000	48,5	19,9	28,6	170	6,97
1960–1965	73.000	27.000	46.000	49,0	18,3	30,7	150	7,18
1965–1970	90.000	30.000	60.000	49,5	16,8	32,7	125	7,48
1970–1975	109.000	33.000	76.000	49,0	14,8	34,2	105	7,59
1975–1980	131.000	35.000	96.000	47,3	12,7	34,6	68	7,38
1980–1985	158.000	38.000	120.000	45,6	10,9	34,7	50	7,18
1985–1990	123.000	22.000	101.000	29,9	5,3	24,6	38,0	5,65
1990–1995	113.000	20.000	93.000	24,7	4,5	20,2	28,3	4,10
1995–2000	115.000	20.000	95.000	23,0	4,0	19,0	20,5	3,25
2000–2005	134.000	22.000	112.000	24,3	4,0	20,3	17,7	3,00
2005–2010	145.000	24.000	121.000	24,0	4,0	20,0	15,0	2,72

Figure 4: Birth rates, death rates, and fertility rate across years

70.56-77.83 years. However the 2011 estimation was 67.64-75.5 years for men and 73.39-80.27 years for women as women live longer than men due to biological features.

Generally speaking the world life expectancy has experienced an increase in the recent years (Figure 13)

Possible approaches to healthy aging:
There are some approaches which could be utilized in order to improve the health of the elderly for happy healthy aging.
The environment should be enabling as well as supportive. The whole process should be with multidisciplinary approaches, for instance integration of doctors, nurses, family, social workers, and the community. Also we need to have; 1- Specialized clinics at the level of primary care health centers. 2- Availability of trained nurses and different specialty doctors. 3- Educating clinicians, educators and students. 4- Protocols for geriatric follow up care.

Also the capacity building is an issue which should be considered very well as many elderly are still capable of production in the community effectively.

The physical, mental and social wellbeing should be enhanced and looked after, as well all the measures of Quality of life (QoL) should be improved.

We need to have the right pharmacological interventions when needed.

Ensure equity and fair distribution and aim for prevention of health inequality.

Elderly should have their own social connections, in order to avoid loneliness and withdrawal which will have some dreadful consequences.

Elderly should have family and community cohesion and contributions.

We need to invest in the aging population by providing continuous education and re-training, with supply of modern information, computers skills and internet usage.

Identifying Evidence-based protocols for managing common geriatric syndromes and conditions, i.e Hartford Institute for Geriatric Nursing, which was established in New York City in 1996, and have called for changing in practice, education, research, and advocacy policy.

Also lastly there should be centres to enhance research to promote healthy aging.

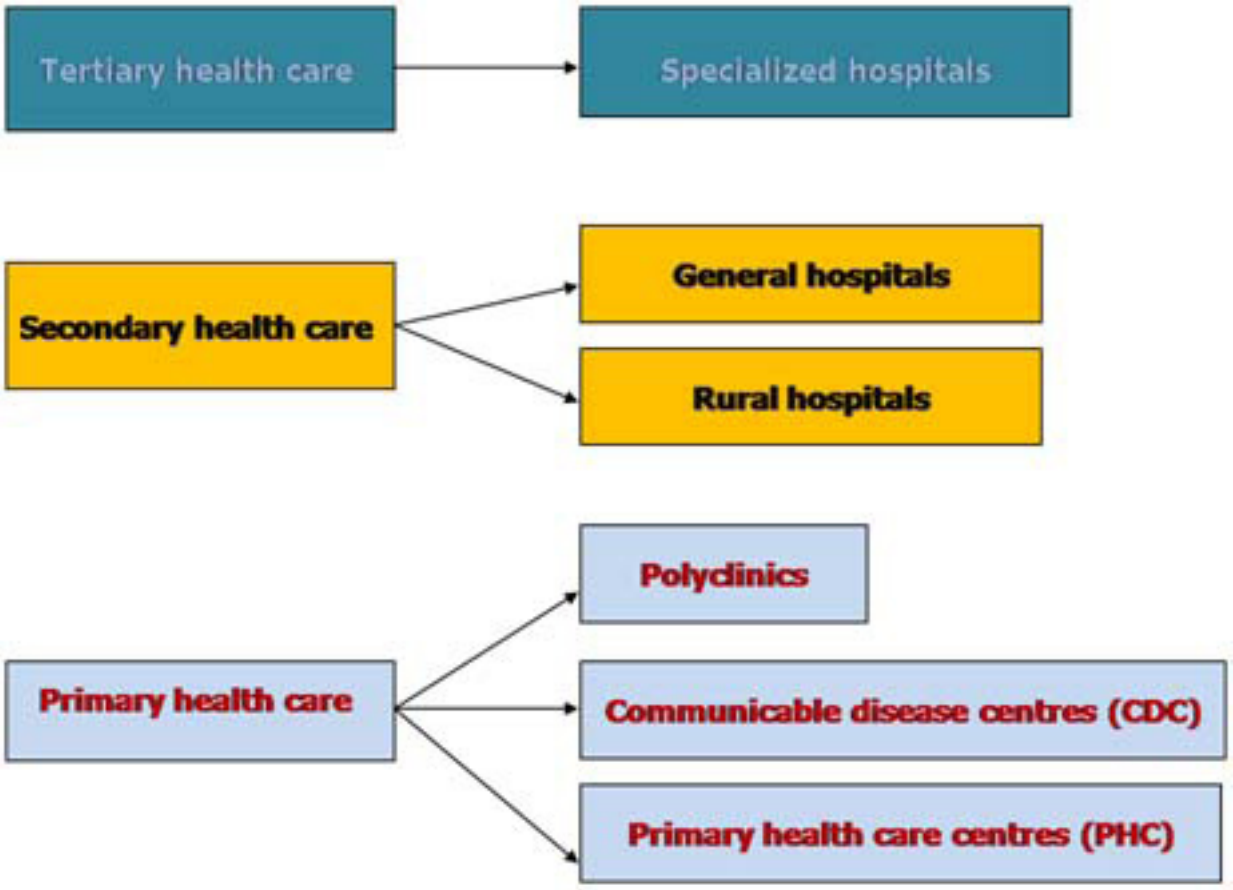


Figure 5: Levels of health services in Libya

Service Availability

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Antenatal care- post conflict	22.4%	233
2. PMTCT Services- post-conflict	0.6%	6
3. Normal delivery and/or newborn care services- post-conflict	3.9%	41
4. Comprehensive emergency obstetric care- post-conflict	3.2%	33
5. Child immunization services- post-conflict	41.1%	428
6. Curative care for under 5- post-conflict	33.1%	345

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Adolescent health & School Health services- post-conflict	24.8%	258
2. Nutrition services - post-conflict	6.9%	72
3. Oral health services - post-conflict	31.5%	328
4. HIV counseling and testing services- post-conflict	6.1%	64
5. HIV & AIDS antiretroviral prescription - post-conflict	0.5%	5
6. Diagnosis or treatment of STIs, excluding HIV- post-conflict	3.6%	37
7. Diagnosis, treatment prescription of TB- post-conflict	2.0%	21
8. Diagnosis or treatment of Leishmaniasis - post-conflict	3.7%	38
9. Diagnosis or management of non-communicable diseases- post conflict	41.4%	431

Types of Basic Health Services	% of facilities providing the service	No. Of Facilities
1. Surgical services- post-conflict	36.5%	380
2. Blood transfusion services- post-conflict	2.0%	21
3. Laboratory diagnostics- post-conflict	35.8%	373
4. Pharmaceutical service- post-conflict	70.5%	734

Figure 6: Different health services

	Total expenditure as % of GDP	Government expenditure on health as % of total expenditure	Government expenditure as % of total expenditure on health	Private expenditure as % of total expenditure on health	Out-of-pocket expenditure as % of private expenditure on health	Per capita total expenditure on health (US$)	Per capita government expenditure on health (US$)
Libya	**3**	**5.5**	**70.3**	**29.7**	**100**	**458**	**322**
Egypt	4.8	5.9	42.2	57.8	97.7	97	41
Tunisia	6.4	10.4	54.1	45.9	87.1	248	134
Oman	2.1	4.9	75.5	24.5	61.4	459	347
Malaysia	4.3	6.9	44.1	55.9	73.2	353	156
Sweden	9.4	13.8	78.1	16.8	92.8	4858	3794
Canada	9.8	17.2	69.5	30.5	50.9	4445	3090
UK	8.7	15.1	82.6	17.4	63.7	3771	3116

Figure 7: Health expenditure in Libya

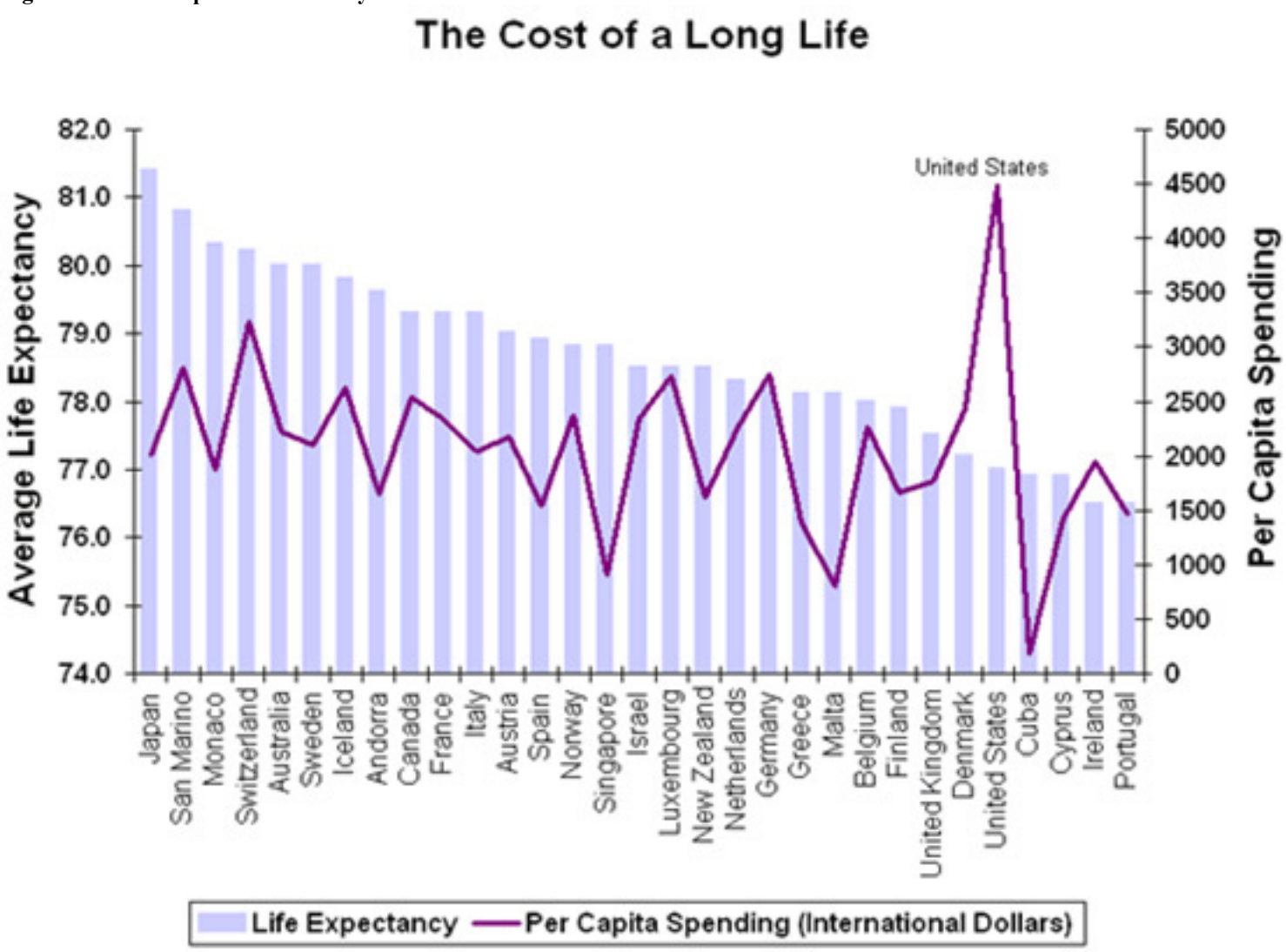


Figure 8: Cost of a long life

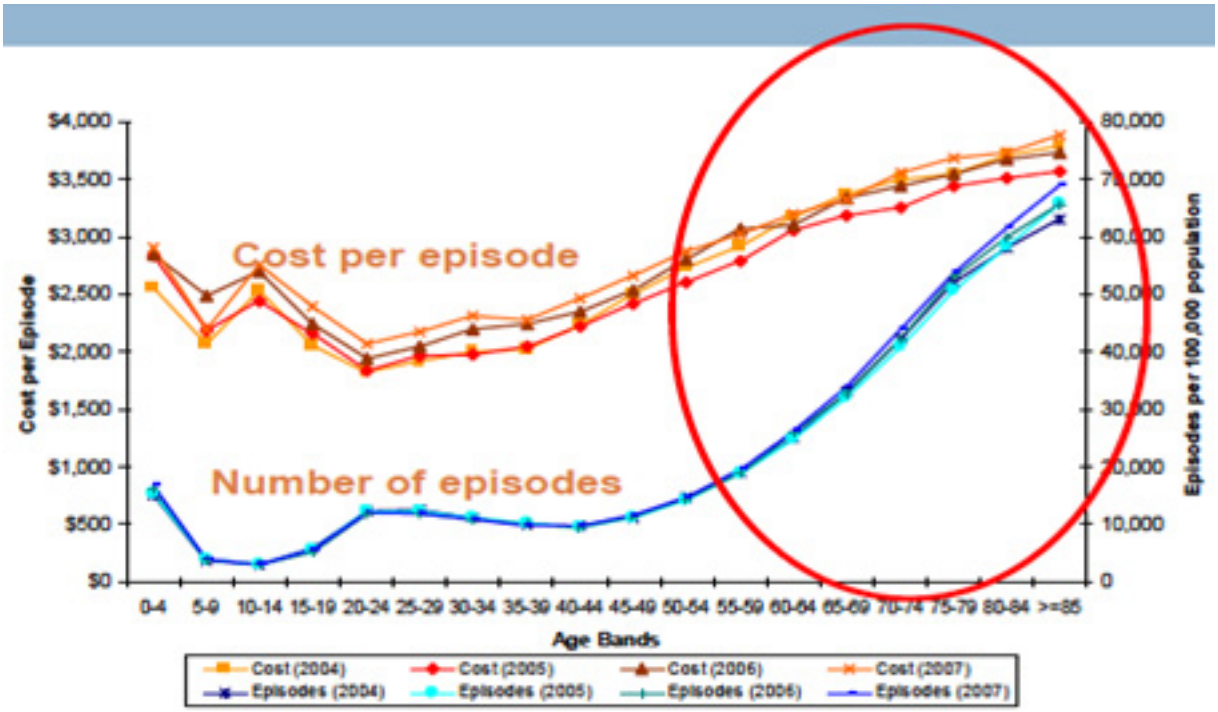


Figure 9: Cost per episode in the elderly

The population pyramid for Libyais projected to look like the following;

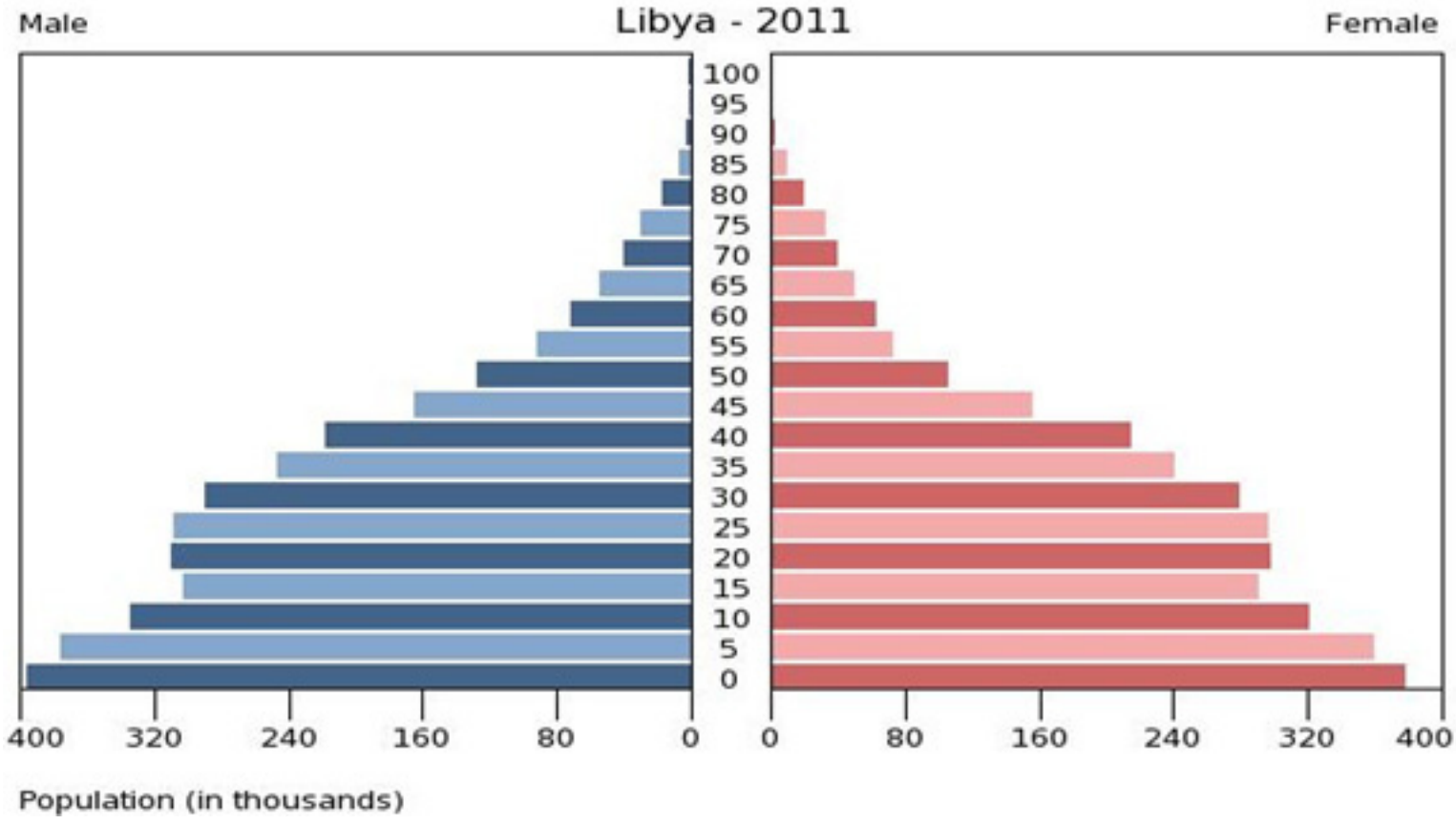


Figure 10: Population pyramid 2011

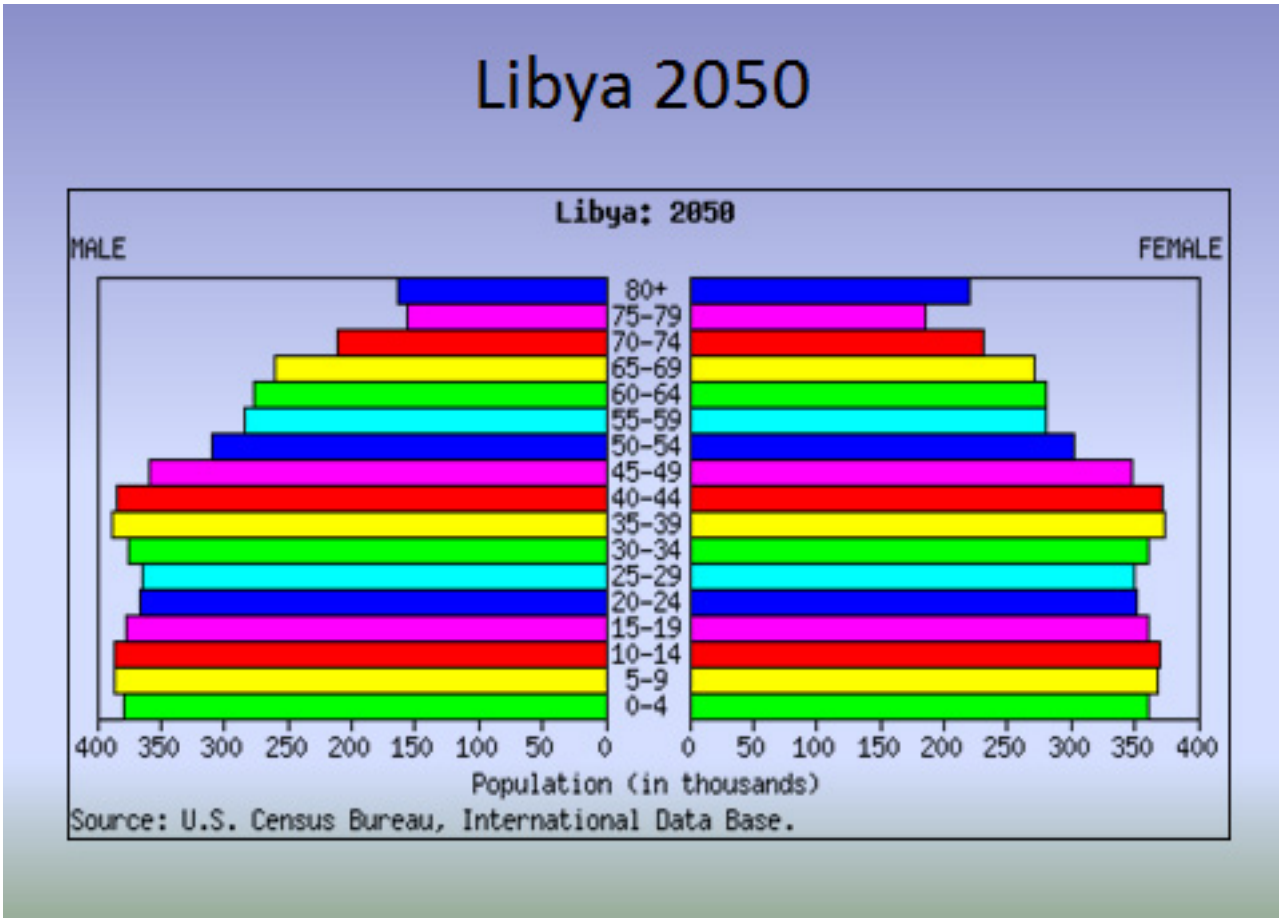


Figure 11: Projected population pyramid for 2050

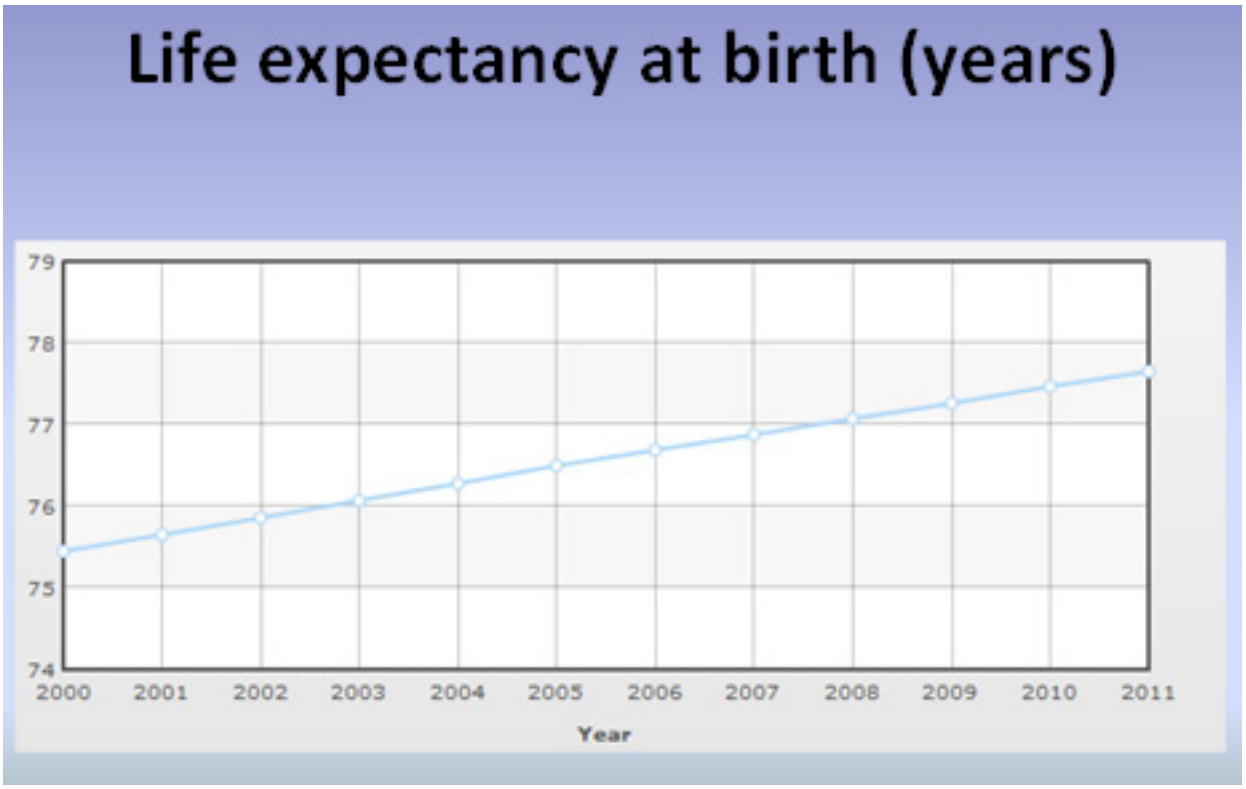
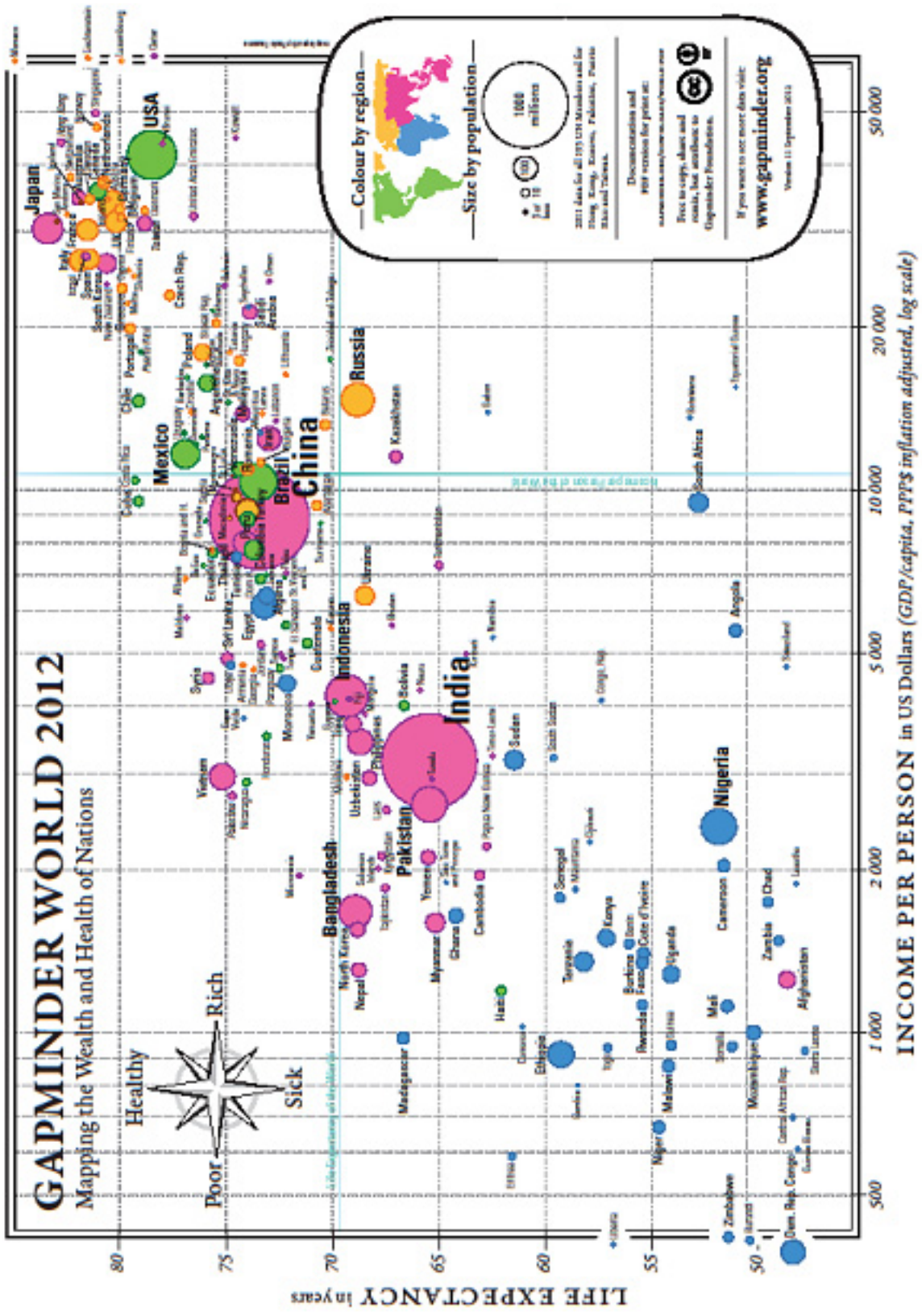


Figure 12: Life expectancy



Policy framework and Recommendations:
Promoting and maintaining health care for old age.
Ensuring and enabling a supportive environment socially and economically.
Creating a system of data generating and research as a tool for policy making and evaluation.
This can be achieved by:
Technical advances implementations.
Social organisation establishment.
Health expenditure provision and health education promotion.

Key determinants for wellbeing of elderly (Australian Model)
The following model displays the health care system for Australia and has addressed every single piece concerning the elderly.

Some differences between DVs and developed countries;

Developing countries	Developed countries
• Family support (C/S)..?	• Looked after (institutional) (transportation etc)
• Pensions? Not clear though.	• Paid job, pensions
• Lack of exercise and physical activity.	• Spend time in vacationing, exercise.
• No leisure activities for elderly in the Arab nations. • Misuse of medicines.	• Fill leisure in voluntary work, look after kids and frail people.
• Premature death.	

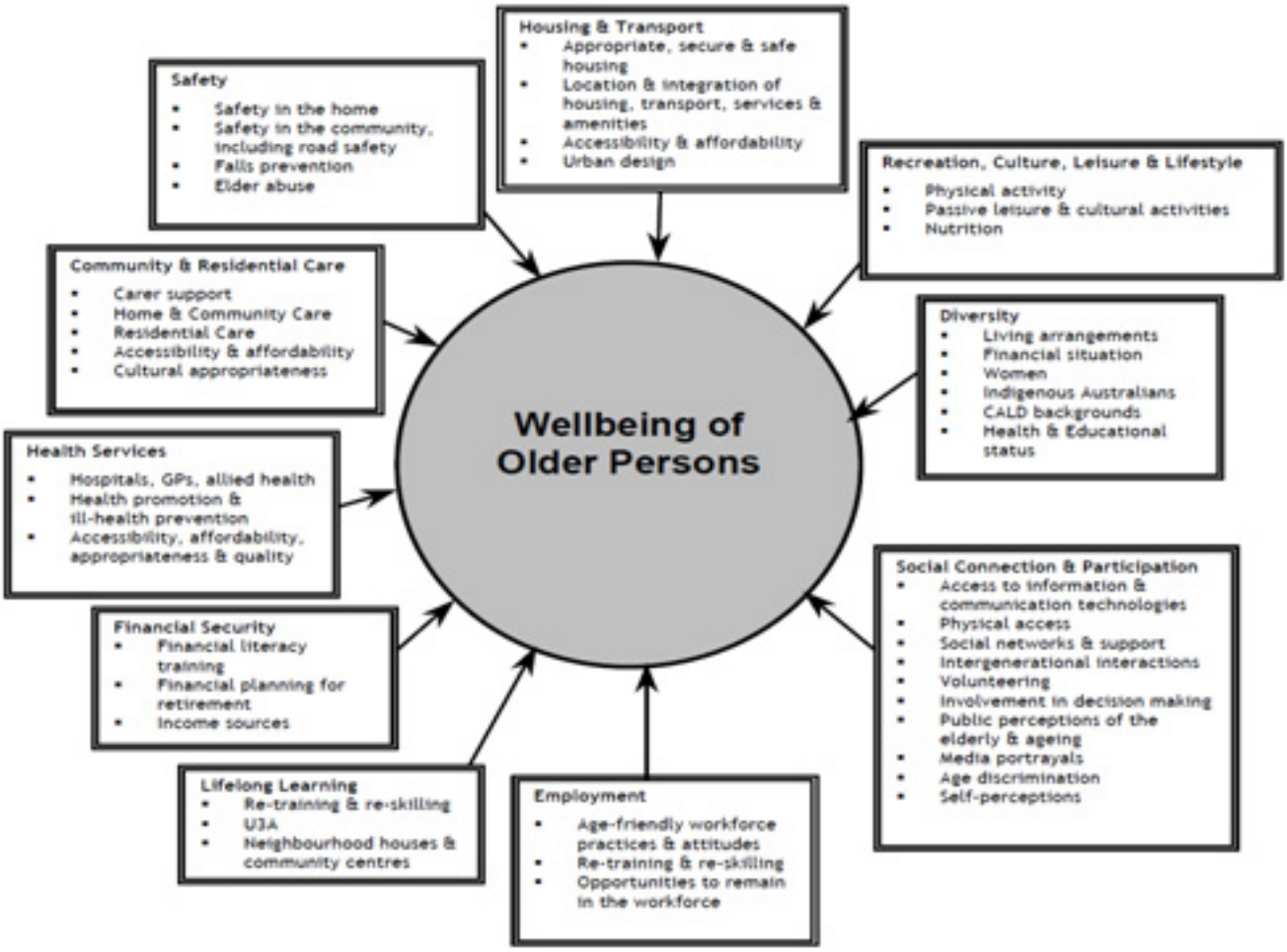


Figure 14: Australian model

يطن قسم الحماية الصحية للعجزة والمسنين بالمركز الوطني لمكافحة الأمراض عن الشروع في إجراءات الاحتفال باليوم العالمي للمسنين لسنة ٢٠١٢م. والذي يوافق الأول من شهر أكتوبر من كل عام وتتضمن برامج الاحتفال ما يلي :-

1 – معرض للرسم والصورة والأعمال التقليدية والفنية والصناعات الخفيفة الذي يزاولها المسنون يوم الأحد الموافق 01/١٠/٢٠١٢م. في مدينة الزاوية.

٢ – مسابقة للشعر والقصة القصيرة والرسم والصورة والأعمال اليدوية والفنية يطن عنها في نهاية المعرض.

Libya is trying hard to perform something for the sake of the elderly. The Centre for disease control (CDC) has suggested the first of October be the national elderly day and a day was held in Zawia city to encourage hobbies and talents of elderly and hopefully in the future to have a specific system for elderly in place.

Geriatric centers in Libya?
There are four main geriatrics centres in Libya; one in the capital Tripoli which is about 10 km from the centre (namely Dar Elwafa), and another in the second city of Libya in Benghazi, and other two in the Eastern area, namely Misrata and Ejdabia consecutively.

Dar Elwafa is considerably a new building with four main floors, the upper two for women and the bottom two for men. It is a free service and depends on governmental funds and generous donations.

The admission is estimated to be around about 100-120 customers annually, with men admitted more than women, and mostly Libyans with a few non Libyans.

There are some conditions for acceptance and admission however these not all the time applicable; and such conditions are available if the elderly are not supported by the family or financially, and are not infectious, with women to be above 46 years, and men to be above 60 years of age.

The medical classification for cases in the centre:
bedridden cases, wheel chairs cases, mobile, and cases with daily medications and interventions. There has been no cases of T.B nor HIV for the last ten years and only some cases of Hepatitis C and B infection.

The number of nurses who are not trained in this area is 15 and work on shifts bases, and only one none Libyan doctor who is not specialized as well in this specialty. He resides in the center and looks after all patients and refer them when needed to either governmental or private centre's according to case's wishes.

The center runs mainly as a preventive and curative measure. The preventative measures are like health surveys, screening annually, vaccination, basic blood investigation annually, and the curative measures are to segregate cases, diagnosis and treat accordingly.

Finally "Ageing is a privilege and a societal achievement. It is also a challenge, which will impact on all aspects of 21st century society. It is a challenge that cannot be addressed by the public or private sectors in isolation: it requires joint approaches and strategies." WHO.

Pelvic pain predicament: a case report

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ABSTRACT

Introduction: Chronic pelvic pain is a common problem and presents a major challenge to health care providers because of its unclear etiology, complex natural history, and poor response to therapy. Shedding light on different scenarios will definitely bring us closer to the pathophysiology of this problem. Moreover, dissemination of data among different journals other than gynecology is essential as many patients seek medical advice from other specialties.

Case report: This case report presents an interesting story of pelvic pain in a 58 year old Egyptian female that took too many turns starting with the diagnosis of vaginal atrophy and going through a diversity of investigations and her wishes were answered in her lifetime and both she and her family found salvation.

Conclusion: This case supports the fact that vulvodynia is difficult both to diagnose and manage given that it is considered as one of our differential diagnoses. Many specialties can face such symptomatology and the physician will be required to at least be able to put a name on the complaints and refer the patient accordingly. I believe, in attempting to understand and disseminate the knowledge regarding this illness; every case is worth reporting. I suppose cases from countries with less research facilities provide a significant supplement to the course of the illness and presenting symptoms due to their late presentation.

Introduction

The International Society for the Study of Vulvar Disease (ISSVD) defines vulvodynia as chronic vulvar discomfort or pain, especially characterized by complaints of perineal burning, stinging, irritation, or rawness and often report urological symptoms such as urgency, frequency, and dysuria, occurring in the absence of relevant physical findings or a specific clinically identifiable neurological disorder [1].

The definition highlights three key points: the location of the pain, its sensory qualities and it's unknown but potentially multi-factorial nature, but fails to acknowledge the role of emotional factors in the development and maintenance of symptoms which is an essential element of the illness that needs to be addressed seriously yet gently.

There is general agreement that the incidence of vulvodynia has increased, not only due to growing awareness of the problem but also to a real increase in the number of women affected [2].

The etiology of vulvodynia is unknown, but most theories suggest permanent sensitization by inflammation e.g. Candida, trauma. This disruption exists even after the initial causative factor is removed [3].

The classification of vulvodynia as a pain syndrome is becoming more widely accepted, with more reports referring to it as a chronic pain syndrome rather than a sexual dysfunction or somatoform disorder [4] which guides us at least towards better management if not diagnosis. Yet, further research on pain mechanisms and mediating symptoms are needed with

dissemination of information regarding diagnosis and management among physicians.

The ISSVD divides vulvar pain into pain due to a specific disorder and vulvodynia, which is further classified into generalized and localized and both may be provoked, unprovoked or mixed [1].

The vulvodynia guideline by Haefner et al, 2005 based on a comprehensive review of literature and cumulative experience of a panel of practitioners, sought to offer clinicians guidance on management of cases from the time of diagnosis through to the selection of treatments. However, due to the complexities of vulvar pain, the guidelines acknowledged the reality that no single treatment is successful for all women and no rapid solution of symptoms is likely [5].

Randomized, controlled treatment outcome studies are currently lacking in this area, therefore, firm conclusions cannot yet be drawn regarding the effectiveness of all oral medications in the treatment of vulvodynia. Decreasing the frequency of the pain and improving the woman's quality of life should be the goals of management.

Due to the ambiguity of this illness researchers are desperate to find associated conditions which may help explain the etiology of the illness or aid in the management. In my research for writing this case report I came across an interesting research item where Assistant Professor Andrea Nackley (pharmacology) and Associate Professor Denniz Zolnoun, (obstetrics and gynecology and director of the Vulvar Pain Clinic), both of the University of North Carolina, were awarded an NVA grant to investigate possible common mechanisms in vulvodynia and temporomandibular joint/muscle disorders (TMD). What makes this interesting to me is that my patient did suffer greatly during her illness from a terrible attack of temporomandibular pain and stiffness requiring NSAIDs for three weeks. I did not consider it essential to the context of the report until I came across this research proposal.

Case Report

A 58 year old obese female patient and mother of five, sexually inactive, menopausal for 15 years, presented with vague burning sensation in the vulva, of moderate severity not referred, associated with recurrent attacks of urinary frequency, nocturia and mild dysuria. Several urinary antiseptics partially relieved the symptoms. Repeated urine cultures showed no apparent cause for the symptoms. Gynecological consultation diagnosed the case as vaginal atrophy and was prescribed conjugated estrogen vaginal cream. The patient's symptoms markedly improved for about one year with infrequent exacerbations. The exacerbations later became more severe and frequent and did not respond to increasing the dose or changing the brand. (It is worth mentioning that the cream is not available in the Middle East and the patient depended on smuggled samples which made her at first question the efficacy of the brands rather than suspect a different diagnosis). She increased the dose according to the gynecologist's advice until she experienced postmenopausal bleeding due to endometrial hyperplasia which was benign after an endometrial biopsy and controlled on progesterone. Her gynecologist failed to help her so she visited several others. Her symptoms didn't improve after being prescribed antifungal vaginal cream, oral antifungal, tricyclic antidepressant, K-Y® gel, steroid vaginal cream and several over the counter soothing ointments. Tests performed were transabdominal and transvaginal ultrasonography, pelviabdominal CT with contrast, L-S MRI, urine cytology, complete blood picture, ESR and liver and kidney functions and all were within normal. Visiting a urologist wasn't helpful. An eminent neurosurgeon ridiculed the possibility of neuropathy resulting from her L5-S1disc prolapse and spinal canal stenosis. At this stage there was severe deep vague pelvic pain described as different from the initial pain, similar to pain of a raw surface, severe requiring opoids for partial relief, not referred, increasing with urination, with no identifiable relieving factors. The patient became severely depressed with death wishes, refusal of feeding and medications and she lost 20Kg in one month. After losing all hope of improvement they consulted a specialist for pain control as a palliative last option. He claimed that this might be irritation of the vaginal nerve endings from longstanding atrophic vaginitis. He explained his theory to the patient's relatives and gave them hope. Just the fact of having hope in controlling the excruciating pain provided peace for both the patient and her family. The patient's pain was controlled on flavoxate 100mg once daily, thioctic acid 300mg twice daily, gabapentin 800mg daily, sertraline, vitamin B complex; she regained her daily functional activity and elevated mood. A month later she re-experienced pain similar to the first presenting pain and only moderate in severity. She was willing to live with it but her doctor suggested using low dose estrogen in the form of vaginal tablets with yearly endometrial biopsy. The patient now experiences from 0-20% pain, negligible as the patient describes it, and is starting to decrease the doses of gabapentin now 500mg. The only significant residual symptoms are those of anxiety of recurrence, may God forbid.

Conclusion

Non-responsive vaginal atrophy warrants reassessment. Treatment of associated symptoms such as depression is indispensable. The goals of treatment must be realistic. They should be focused toward restoration of normal function (minimal disability), better quality of life, and prevention of relapse of chronic symptoms.

Sources of information:
1) National Vulvodynia Association (www.nva.org)
2) Vulvar Pain Foundation (www.vulvarpainfoundation.org)

Counseling:
http://www.med.umich.edu/socialwork/shcs/books.htm

Acknowledgement: The patient and her family offer Dr. Elshaer A. their most sincere gratitude and wishes of good health for diagnosing and treating the case and giving them back their life.

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Case Report

Basal cell carcinoma with perineural invasion: a case report

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ABSTRACT

Perineural invasion of skin tumor was first mentioned by Cruvellier in 1835.

Perineural invasion is an important mode of tumor spread and is associated with increased aggressiveness and a tendency for recurrence among cutaneous malignancies. Skin cancer with neurotropisim is an uncommon phenomenon that occurs when cancer cells surround a nerve sheath and spread down the length of the nerve whether superficial or intracranial. This is sometimes associated with skip lesions along the involved nerve.

Neurotropisim involvement is most often asymptomatic necessitating a keen search, particularly for tumors overlying major nerve trunks.

A leading question of history of skin cancer in suspicious cases along with neurological examination is important in detecting some cases of skin cancer with perineural invasion. Magnetic resonance is the preferred imaging method of the evaluation of head and neck perineural tumor spread because of its superior tissue contrast and multiplanar capabilities and it worsens the prognosis if it is positive for perineural invasion.

A combined therapy (MOHS micrographic surgery and post operative radiation therapy) is preferable for better cure in cutaneous cancer with perineural invasion.

We present here the first reported case of skin cancers with perineural invasion in Jordan in addition to make a highlight about this phenomenon since its incidence is much more common than previously recognized.

Key words: perineural invasion, basal cell carcinoma, mohs micrographic surgery

Background

Perineural invasion of skin cancers was first mentioned by Cruvellier in 1835(1) involving the facial nerve, followed in 1862 when Neumann reported a lower lip carcinoma with mental nerve invasion. (2)

Basal Cell Carcinoma (B.C.C), the most common skin cancer in white races is generally a benign form of skin cancer; but certain types like morpheaform, infiltrative and sclerosing tend to be aggressive, more likely to recur, or to have positive margins at excision.(3-6)

Incidence of Perineural invasion for (B.C.C) was found by mohs (7) to be 1% and 0.178% by Niazi and Lamberti. (8)

"Skin cancer with neurotropisim is an uncommon phenomenon that occurs when cancer cells surround a nerve sheath and spread down the length of the nerve whether superficial or intracranial (9). This is sometimes associated with skip lesions along the involved nerve and this explains why despite negative margins being obtained, there is a risk of recurrence of the tumor after resection". Symptoms of early perineural spreading usually needs a high index of suspicion along with leading questions and neurological examination which is frequently formication (a skin sensation of ants or worms crawling underneath the skin) which will progress to pain, numbness and motor deficit if untreated (10).

Case Report

The patient is a 67 year old female with a history of prior skin cancer removed by excision in 2005. She recalls developing a scab along the left ala of her nose approximately 5 months ago. There was no history of numbness or parasthesia in the area, no history of weight loss or loss of appetite and no previous radiation therapy.
Past history: hypertension, hepatitis, diabetes, previous skin cancers and mitral valve prolapsed.
Family history: her mother had a colon cancer

On examination: a well appearing lady, body weight 71 kg. With stable vital signs
Head and neck: a small scab 0 .7 *1.1 cm in left ala of her nose (Figure 1)

No adenopathy or parotidodpathy
2-3mm blanching erythematous area in the region of excision of skin carcinoma on the right side of her nose, two hypo pigmented areas of the left temple where previous moles had been removed.
Cranial nerve examination was normal with no neurological deficit.
Back: few small surgical scars consistent with excision of basal cell carcinoma
Biopsy done in Dec-17-05 showing sclerosing basal cell carcinoma
So she was scheduled for mohs micrographic surgery in King Hussein medical center in January 14 2006.

During the procedure she was found to have infiltrating basal cell carcinoma with squamous differentiation and in the second stage perineural invasion was prominent (Figure 2) so the case was reviewed by a dermatopathologist and he felt additional examination of all blocks should be made so all mohs specimens were bottled and sent to routine H@E examination to insure that the margins were negative and the patient was cleared after five mohs stages.

MRI brain scan was done for her post mohs margin clears (Figure 3) with and without contrast and there was no evidence of metastatic disease.

The case presented in the multidisciplinary tumor board with a review of pathologic slides and discussion with dermatologist, medical oncologist, pathologist and radiation oncologist; recommendation was to give her radiotherapy prior to proceeding with reconstruction based upon aggressive nature of her tumor area and likelihood of recurrence.

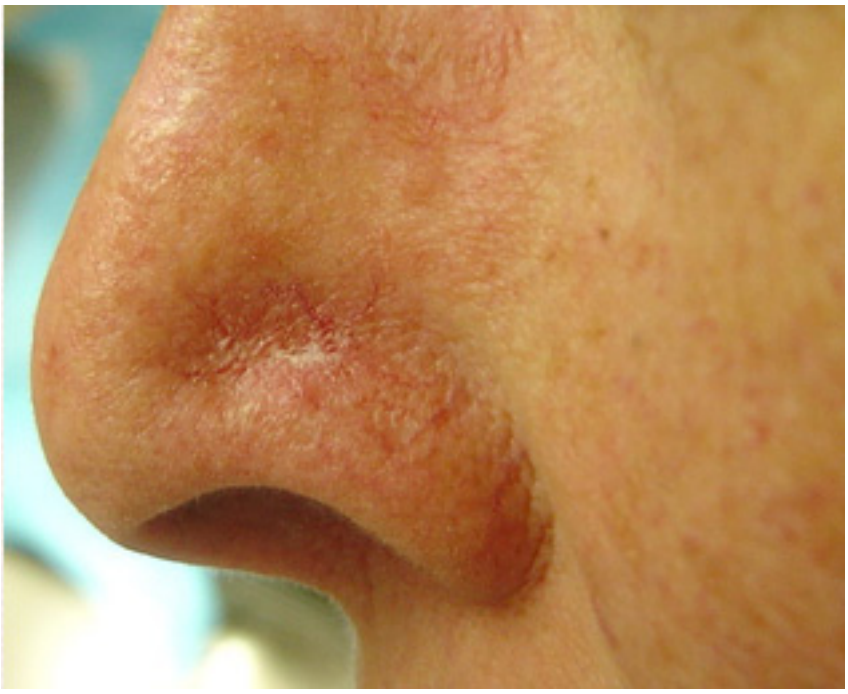

Figure 1. Preoperative physical examination

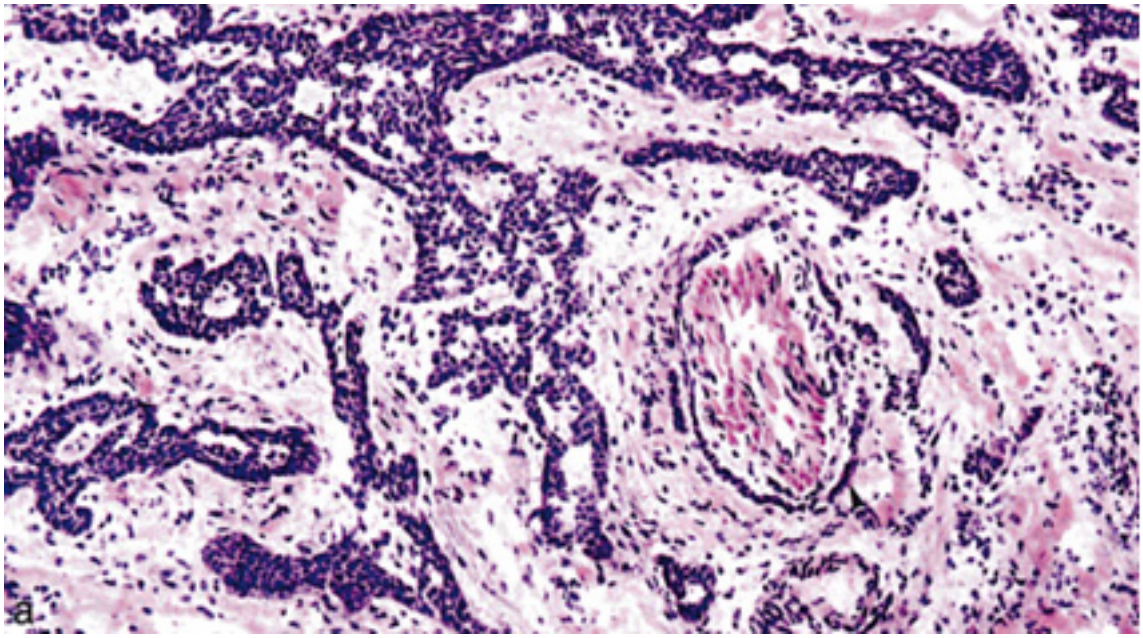

Figure 2. Basal cell carcinoma with perineural invasion in a low power magnification

Figure 3. The defect post mohs margin clearance

Radiotherapy was done for her on 02-18-2006 for the nose area with 36 elapsed days (number of treatments 25) with a total dose of 50 Gy and repeated on 03-27-2006 for 4 elapsed days (number of treatments 5) with a total dose of 10Gy, so the final total dose was 60 Gy.

Follow up was done at 3 weeks, 2 months and 7 months post radiotherapy. There was no evidence of local recurrence and no adenopathy.

She was scheduled for reconstruction plastic surgery in December 2006.

Discussion

Incidence of neurotropism in basal cell carcinoma is much more common than previously recognized; this was documented by a study done by Desiree, Lori, Timothy and Darrell (11),. It showed 8 of 78 (10%) of examined specimens exhibiting perineural invasion and 21 of 78 (27%) revealing perineural inflammation and that tumors with perineural inflammation and or tumor invasion extend further beyond clinically detectable margins than those without perineural involvement.

Several factors that play a role in perineural spread include tumor location on the face, male sex, tumor size more than 2 cm and previous treatment of the lesion. (12, 13, 14)

Basal cell carcinoma with perineural invasion reported in the literature by Ballantyne (9) Dodd (15) Mark (16) Gormley (17) Hanke (18) Eng (19) Carlson (20) had the following results: the most common location was the head, with no primary lesion but there was a history of previous radiation therapy.

That was nearly consistent with our case since the tumor was located on the nose and there was a previous history of treating skin cancer on the face but the gender was female and there was no history of previous radiation therapy.

A number of authors have recommended that patients who have basal cell carcinoma with perineural invasion be treated with mohs micrographic surgery or excision surgery followed by post operative radiation therapy. (21, 22, 23, 24)

They depend upon results in squamous cell carcinoma with perineural invasion which showed that combined surgical and post operative radiation therapy resulted in a high cure rate and improved functional result. (9, 15, 25, 26).

Others depend on the extent of the disease so they do mohs surgery alone in early disease with free margins(13) but taking into consideration the possibility of skip lesions; others do radiotherapy just if margins are involved(9) but most mohs surgeons now recommend adjuvant radiotherapy after negative margins for better outcome. In advanced cases radiotherapy is almost always required since consistently resection margins are positive if operated upon or disease is beyond surgery.

In our case the tumor was basal cell carcinoma with squamous differentiation and perineural invasion so the decision was to treat her by a combination therapy mohs micrographic surgery and post operative radiation therapy for a better result.

Magnetic Resonance (MR) is the preferred imaging method of the evaluation of head and neck perineural tumor spread because of its high tissue contrast and multiplanar capabilities and it plays a prognostic factor if it is positive for perineural invasion. (27)

Recommendation for MR includes BCC with neurological symptoms, histopathological evidence of neurotropism and locally advanced or deeply infiltrating recurrent squamous or BCC. (10)

It was obvious in our case it is infiltrative type basal cell carcinoma with perineural invasion with a history of previous skin cancers so MR imaging was done and it was negative.

Conclusion

Skin cancer with perineural invasion seems to be increasing in incidence. A leading question of history of skin cancer in suspicious cases along with neurological examination is important in detecting some cases of skin cancer with perineural invasion.

Also a combined treatment plan is recommended for better outcome in the appropriate cases.

MR imaging is a useful tool in evaluation of skin cancer with perineural invasion,.Together with team planning (Dermatologist, Pathologist, Oncologist and Radio Oncologist) it is recommended in the evaluation of skin cancer with perineural invasion.

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International Association for Gerontology and Geriatrics

Preliminary meeting on

"Is there a place for IAGG in the Middle East?"

Saturday, September 22, 2012
Hamad Medical Dity Club House
Doha, Qatar

Minutes

Chair
Bruno Vellas, MD, PhD, Toulouse, France
Jean-Pierre Michel, MD, PhD, Geneva, Switzerland
Tawfik A. M. Khoja MBBS, DPHC, FRCGP, FFPH, FRCP (UK), Riyadh, Saudi Arabia

Attendees
Fawzi A. Amin, MBBch, MPH, PhD, Bahrain
Hala S. Sweed, MD, Cairo, Egypt
Palmi V. Jonsson, MD, FACP, FRCP L, Reykjavik, Iceland
Giovanni Gambassi, MD, Rome, Italy
Daniel Beard, Malakoff, France
Abeer Khaled Al-Baho, MD, Kuwait
Abdulrazak Abyad, MD, MPH, MBA, AGSF , AFCHSE, Tripoli, Lebanon
Elie Stephan, MD, Beirut, Lebanon
Ebtisam Elghblawi, MBBCh, MScRes, ADD, DRH, Tripoli, Libya
Miel W. Ribbe, MD, PhD, Amsterdam, The Netherlands
Nasir Mahmood, BSc, MBBS, MPH, Chakwal, Pakistan
Akram A.O. Amro, MPH, Jerusalem, Palestine
Marwan Ramadan, RACP, AGSF, ABIM, ABEM, Doha, Qatar
Essa Mubarak Al-Sulaiti, Doha, Qatar
Hashim Hasan Balubaid, MB, ChB.SSC-MED, Riyadh, Saudi Arabia
BahseerM; Al-Sufyani, MD, MPH, Riyadh, Saudi Arabia
Salwa Abdulla Alsuwaidi, Dubai, United Arab Emirates
Omar Hussein Fayed Mujalli, Sanaa, Yemen

Welcome
Bruno Vellas,MD, PhD, IAGG President
Brief presentation of the IAGG. The Society was created in 1950. It is present in 70 countries and currently has five Chapters (Africa, North America, Asia & Oceania, Latin America & Caribbean, Europe) with around 50,000 members. It is important that the Middle East also be represented in the Society. For this initiative to be a success, it is necessary to for all to work together.

Introduction
Tawfik A. M. Khoja MBBS, DPHC, FRCGP, FFPH, FRCP (UK)
Director General – Executive Board of the Health Ministers' Council for GCC
Care of the elderly is important concern in the Gulf Cooperation Council (GCC - United Arab Emirates, Bahrain, Saudi Arabia, Oman, Qatar and Kuwait) countries and is part and parcel of Muslim culture and faith. The first Gulf Symposium for diseases of the elderly and care of the aged was organized in 1994 in Riyadh, following which a series of recommendations were made to all member States:

1. Introduction of geriatrics and health care of the elderly in the curricula of medical colleges and health institutions.
2. The importance of introducing a separate department for health care of the elderly at the central level in the ministries of health and in the directorates of health, as well as establishing elderly care units in the main hospitals.
3. Incorporation of health care of the elderly with the elements of primary health care.
4. Establishing a multipurpose program to plan preventive health services for the elderly in each member state.
5. Encouraging home care of the elderly rather than isolating them in hospitals unless this is urgently required.
6. Equipping certain establishments and facilities for specific groups of elderly persons who need specialized services whether indoor or outdoor.
7. Encouraging and supporting health research in the various fields and urging individuals and donor societies to contribute in sponsoring and financing such research.

The second Gulf Symposium was held in Abu Dhabi in November 1997. The ensuing recommendations were validated by the Executive Body with particular emphasis on:

• developing geriatric health services in the member States
• strengthening the departments and divisions of geriatrics in the Ministries of Health and main hospitals
• planning preventive and rehabilitative programs for the elderly and incorporation of such services within primary health care
• giving effect to the role of education about diseases of the elderly
• encouraging voluntary work to assist elderly people utilizing international experience in this field.

This was followed by a number of meetings and resolutions, culminating in the adoption of the Riyadh Charter on Elderly Care in March 2009 which highlighted the respective roles of government bodies (Ministries of Health, Ministries of Labor and Social Affairs), lawmakers, the media, and of the family and community in taking care of the elderly.

This was further reinforced by the Tripoli Declaration on Older People in November 2009. This highlighted the need for national coordination to formulate healthcare policy for the elderly; accurate data to establish evidence-based care; the establishment of interdisciplinary networks; the development of human resources; the improvement of primary healthcare to fulfill the healthcare needs of the elderly; the development of support for self care; raising public awareness; and providing adequate social and home care, among others.

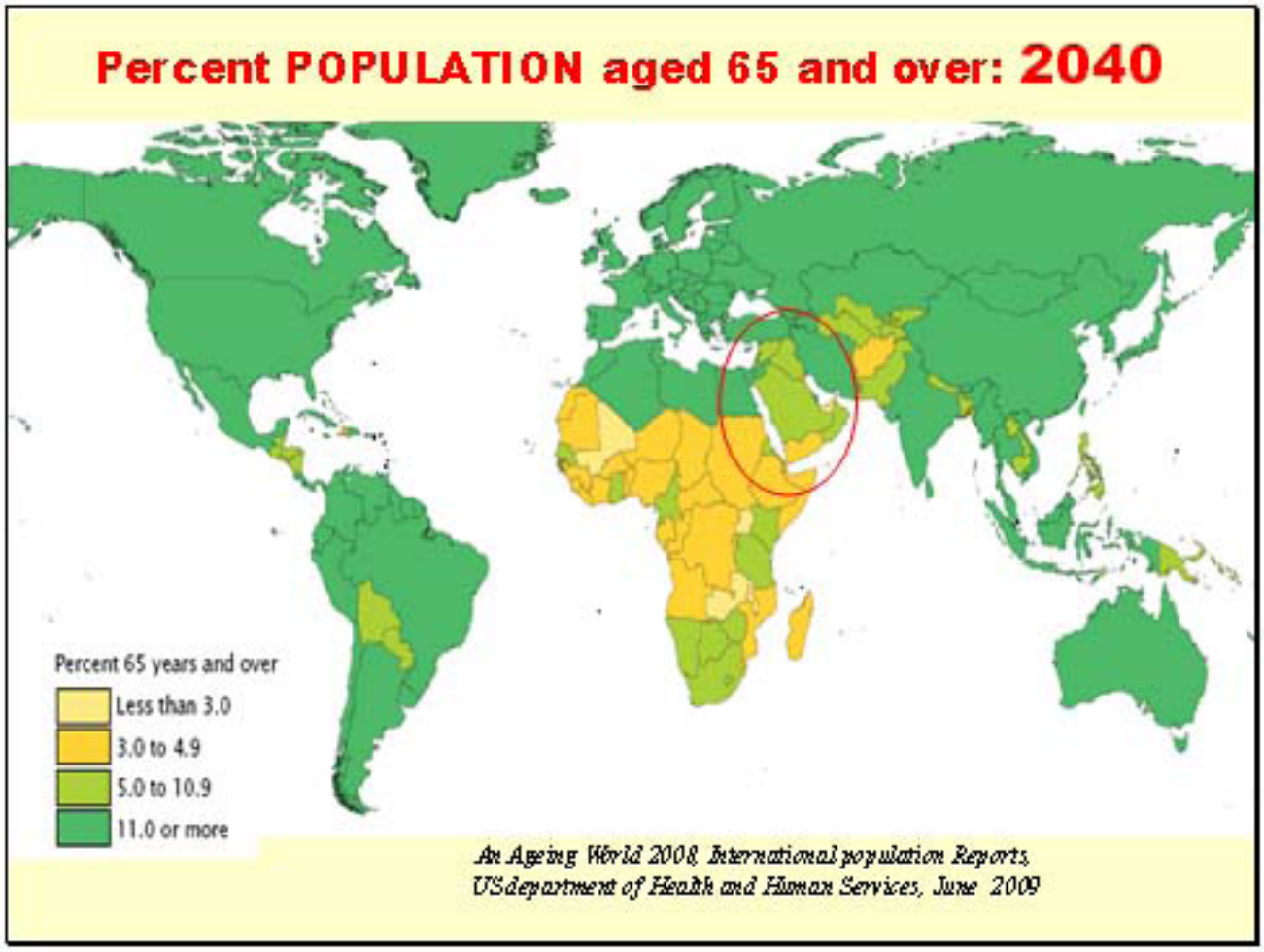
Current Situation of Elderly Care in the GCC (see Appendix 1)
Is there a place for IAGG in the Middle East?

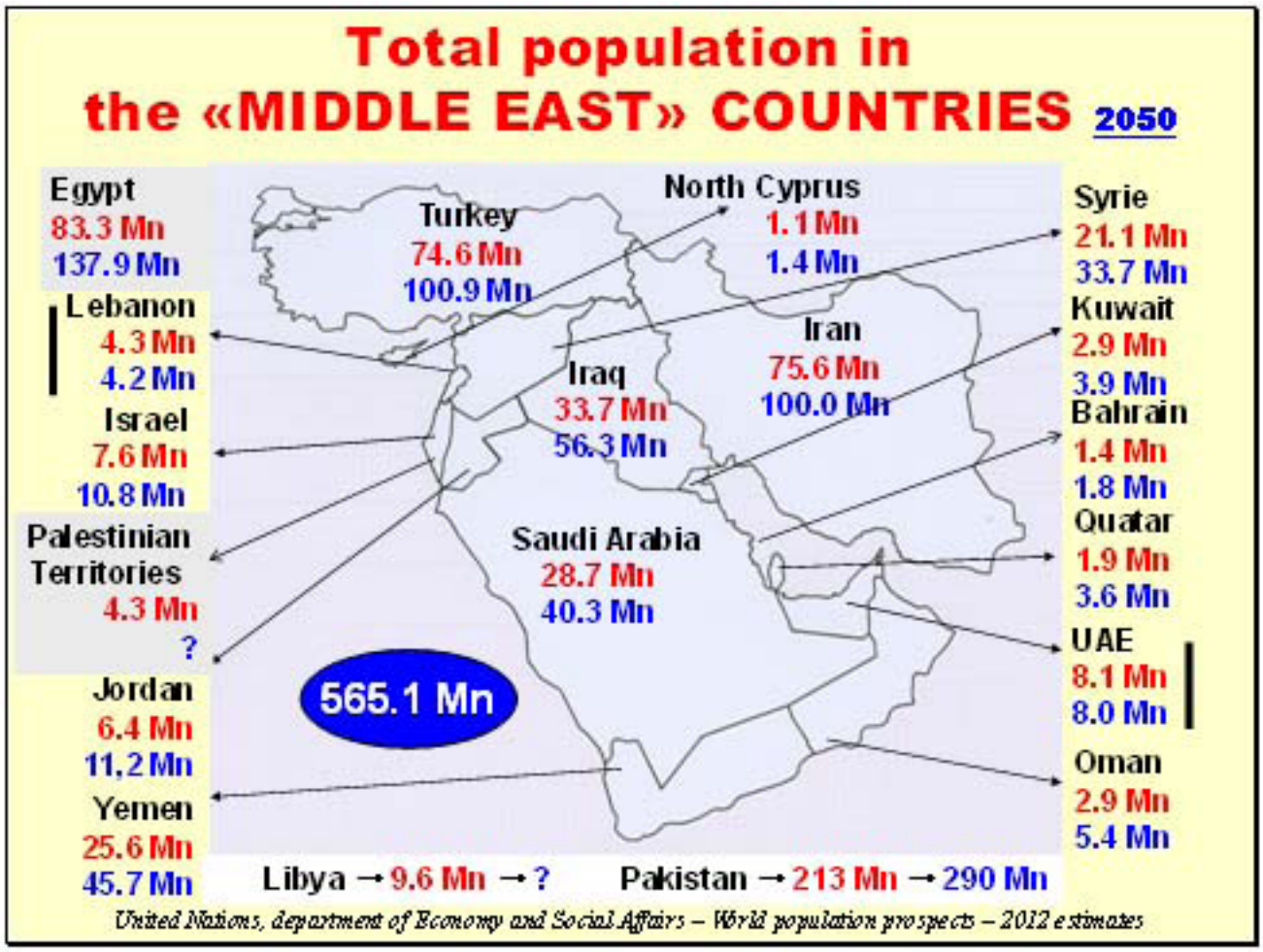
Prof. Jean-Pierre Michel, MD, PhD, Honorary Professor of Medicine, Geneva University, Switzerland; EUGMS President; Co-founder of the MEAMA; IAGG Ambassador for the ME

Currently less than 5% of the population in the Middle East is aged 65 and over. However, this situation will change dramatically in the coming years. By 2040, this percentage will approximately double. As shown by the image below (population estimates for the region 2010 in red and 2050 in blue) the population for countries in the Greater Middle East will reach 565 million by 2050 with another 300 million in Libya and Pakistan. What is evident from age pyramids is that the population in the Middle East is aging faster than it is growing. Hence, the question of elderly care in the region will become more and more important.

MEAMA Activities
Abdul Abyad, MD, MPH, MBA, AGSF, AFCHSE, Lebanon

There are various initiatives to train healthcare workers and to develop services to care for the elderly across the region. Currently, comprehensive teams are lacking. This is all the more of concern given that the elderly population is increasing, as life expectancy increases and fertility rates decrease. However, there are no sufficient statistics on the situation.
The Middle East Academy for Medicine of Ageing (MEAMA) was founded in 2002 to stimulate the development of healthcare services for older people in the region. It was established by a number of professors and teachers from the Middle East and Europe. The Model of MEAMA was taken from the European Academy for Medicine of Ageing (EAMA). The mission of MEAMA is to create a hub for education and training in the field of ageing in the Middle East. Its strategic tools include education and training, human resource development, the creation of a network of universities and educational organizations, and research and publication in the field of aging.
To further education on aging, it organizes post-graduate courses consisting of four 4-day sessions directed towards physicians, nurses, social workers, healthcare officers and others responsible for healthcare for the elderly. Three courses have already been held and the fourth is currently underway.
In order to support activities in the field of aging and Alzheimer's disease, the Middle East Association on Ageing and Alzheimer's (MEAAA) was established and participates in conferences on a regional level and publishes peer-reviewed journals. MEAMA also collaborates in the InterRAI initiative.


Percent POPULATION aged 65 and over: 2040
Percent 65 years and over
Less than 3.0
3.0 to 4.9
5.0 to 10.9
11.0 or more
An Ageing World 2008, International population Reports,
US department of Health and Human Services, June 2009


Total population in
the «MIDDLE EAST» COUNTRIES 2050
Egypt
83.3 Mn
137.9 Mn
Lebanon
4.3 Mn
4.2 Mn
Israel
7.6 Mn
10.8 Mn
Palestinian Territories
4.3 Mn
?
Jordan
6.4 Mn
11,2 Mn
Yemen
25.6 Mn
45.7 Mn
Turkey
74.6 Mn
100.9 Mn
North Cyprus
1.1 Mn
1.4 Mn
Iraq
33.7 Mn
56.3 Mn
Iran
75.6 Mn
100.0 Mn
Saudi Arabia
28.7 Mn
40.3 Mn
565.1 Mn
Syrie
21.1 Mn
33.7 Mn
Kuwait
2.9 Mn
3.9 Mn
Bahrain
1.4 Mn
1.8 Mn
Quatar
1.9 Mn
3.6 Mn
UAE
8.1 Mn
8.0 Mn
Oman
2.9 Mn
5.4 Mn
Libya → 9.6 Mn → ?
Pakistan → 213 Mn → 290 Mn
United Nations, department of Economy and Social Affairs – World population prospects – 2012 estimates

Roles and activities of the IAGG

Bruno Vellas, MD, PhD, Toulouse, France

The goals of the IAGG are:
• to promote the highest levels of achievement in gerontological research & training worldwide;
• to promote gerontological interests globally & on behalf of its member associations;
• and to promote the highest quality of life & wellbeing for all people as they experience aging at individual & societal levels.
It is made up of more than 50,000 professionals representing 64 countries and 71 national associations.
One of the initiatives of the IAGG to foster and enhance gerontology and geriatrics worldwide is to organize high-level workshops every year with the WHO, to provide recommendations to guide all actors concerned by the development of older populations. To this end, the IAGG has obtained Consultative Status within the United Nations.
Other initiatives include the creation of an IAGG/WHO Global Aging Research Network (GARN) to bring together 500 international centers of expertise and the IAGG World Aging Academy.
It should be stressed that the goal of the IAGG is scientific not political.
For the ME countries present to become part of the IAGG, each country should provide a description of how gerontology is organized in the country and a list of between 30 and 50 members from all aspects of elderly care (physician and non-physician). Applications by ME countries will be fast-tracked. The formal application should be prepared for validation during the IAGG General Assembly, in Seoul, Korea, in June 2013.
Establishment of a chapter implies the organization of a regional meeting every 2 to 4 years. (The ME Chapter would also be a candidate for the 2021 global meeting and would have to engage in lobbying to host this meeting.)

COUNTRY PROFILES

BAHRAIN

Fawzi A. Amin MBBch, MPH, PhD, Consultant Family Physician, Arabian Gulf Univeristy, Manama, Bahrain

Currently there are around 33,000 persons aged over 65 in Bahrain. By 2050, this proportion will reach 25%.
There is a good primary healthcare setup that has a holistic approach: screening and prevention in early life should be beneficial in later life. The country is divided into four regions with 25 health centers all connected via a common database. The goal is that patient data be shared between the primary care center and the hub.

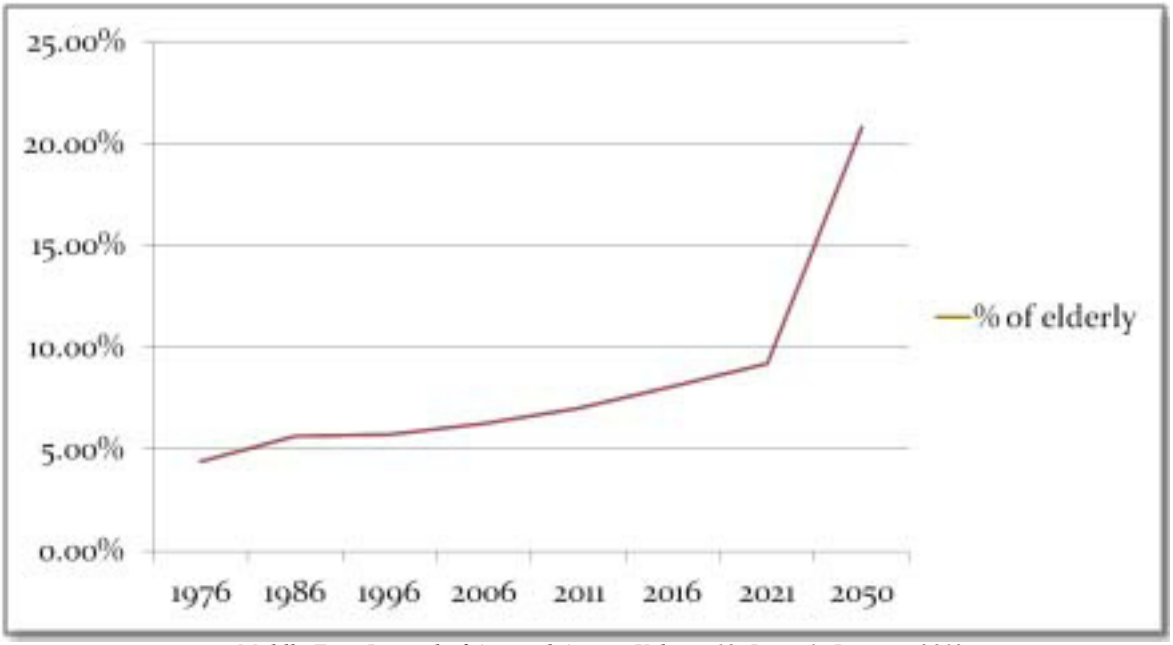
The population in Bahrain is approximately 1 million. On average, patients make four primary health care visits per year (which affords an excellent opportunity to perform screening initiatives). Only 2% are then referred to specialist care in hospitals. Such early screening allows for early treatment and potentially to slow disease progression and improve quality of life.
Importance is being given to the creation of day centers for the elderly, which organize social visits, intergenerational activities and rehabilitation.

Permanent care comes under Ministry of Health. A priority for the Ministry of Health is helping families to care for aged relatives via training and support of home caregivers. Various initiatives in collaboration with the WHO include the preparation of a guideline manual for health care workers, conferences on elderly health (including discussions with lawyers on elderly rights).

EGYPT

Hala Samir Sweed, MBBCh, MSC, PhD, MD, Associate Professor of Geriatric Medicine, Geriatrics and Gerontology Department, Ain Shams University, Cairo, Egypt

Healthcare of the elderly will become an urgent issue in Egypt in the years to come. By 2050, over 60s will represent 20.8% of the population (around 20 million persons).



This will generate huge challenges since only 53% receive state pensions. 82% of women over 70 years of age are widows, and hence have limited financial resources.
To ease this burden, the government has adopted certain measures including additional financial support for females not supported by husbands or sons, privileges (free public transport, reductions for theatre tickets, etc.), and social training programs.
Despite the setting up in 1997 of a Higher Committee of Geriatric Care, there is still a dire need for geriatric structures. There are currently only 161 geriatric homes and 173 clubs covering around 35000 persons.
Under the auspices of the Ministry of Health, a Geriatrics and Gerontology Department was set up at the Ain Shams University in 1982. Some university hospitals have geriatric wards (Menoufia, Mansoura and Alexandria Universities) and psycho-geriatrics units exist in the Ain Shams and Cairo University Hospitals. Since 2006, more than 10 two-floor healthcare centers (with cardiology, neurology capabilities, etc.) have been set up. Military hospitals also provide elderly care, and NGOs and the private sector also play a role. Media channels and newspapers have programs and pages specifically for the elderly.
Ongoing training programs have been initiated in geriatrics and gerontology; however, more needs to be done, including the passing of appropriate legislation and better coordination.

KUWAIT

Abeer Khaled Al Baho, MD, Kuwait, Director Health Promotion Department; Consultant Family Physician, Kuwait

Kuwait has a population just under 3.5 million. The total number of elderly persons over 65 years was 26,570 according to statistics in December 2003. This represented 1.6% of the total Kuwaiti population. By 2011, this number had increased to 39,060 or 3.4% of the same population.
Kuwait has one of the highest life expectancies in the world (male, 78.7; female, 79.4). Health care costs doubled to 800 M dinars (2200 M Euros) between 2006 and 2010.

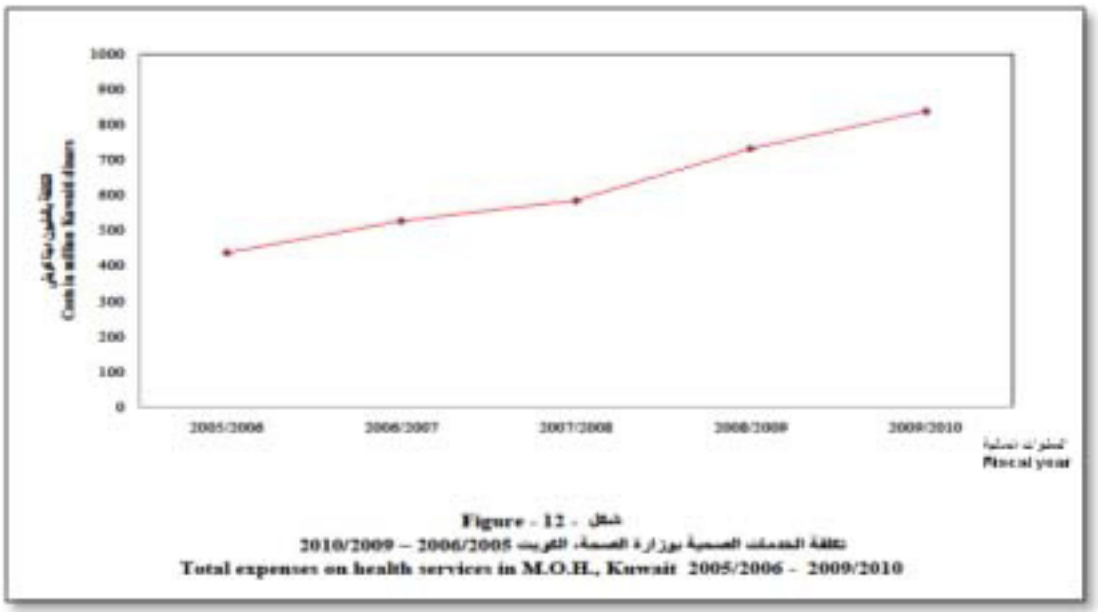


Figure - 12 - شكل
2010/2009 – 2006/2005 تكلفة الخدمات الصحية بوزارة الصحة، الكويت
Total expenses on health services in M.O.H., Kuwait 2005/2006 - 2009/2010

Responsibility for the elderly in Kuwait is divided between the Ministry of Health, the Ministry of Social Affairs, NGOs, care givers and families. Geriatric care clinics has been established all over the country (one clinic per health area) with unified protocol for on-the-spot screening. Mobile geriatric care units take care of those who are bed-ridden and cannot move.
National geriatric care program, headed by Minister of Health has been set up to stratify the elderly population according to their health status.
Health promotion aims to increase the awareness and knowledge of patients, their relatives and the community about how to keep the elderly healthy. Health campaigns have emphasized World Health Day 2012 recommendations focusing on geriatrics.

LEBANON

Elie Stephan, MD, Geriatric Medicine, Head Acute Care Unit for Elderly, and Geriatric Program, St George Hospital, Balamand University, Beirut, Lebanon

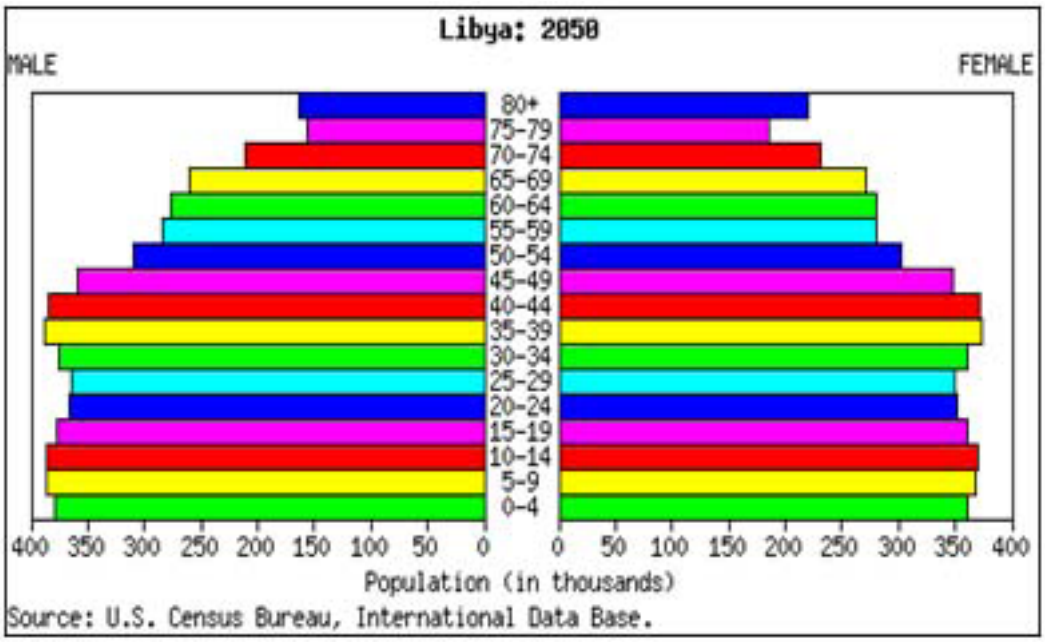
At present, the Government is absent from health care and this is assumed only by NGOs and private initiatives.
35% of the elderly continue to work after the age of 64 due to their financial need. 45% of old women are widows compared to only 9% of men. This represents a big problem where widowed women loose income and health care coverage.
The first in the Alzheimer's disease Association in the Middle East was founded in Lebanon, which is very active, especially the scientific committee which presents monthly lectures to caregivers. One pan-Arab congress was organized in 2005. A building program throughout Lebanon was set up in 2011 in collaboration with the Ministry of Social Affairs, which is still ongoing.
Among a population of around 4.6 million, around 285,700 (8%) are elderly. Less than 1.4% of the total number of seniors in

Lebanon live in long-term care settings; the rest (98.6%) live in their homes. This is just as well since there are only 49 institutions with 4000 beds in the country. Only 18% of these institutions are supervised by a geriatrician.
In addition to these nursing homes and rehabilitation centers, there is a respiratory palliative care unit (10 beds) and an Alzheimer's unit. Within the hospital system, there are highly advanced rehab units in two hospitals (Behannes and Cortbaoui Hospitals), as well as ACE Units in the Aiin-Wa-Zein Hospital and the St George Hospital-Balamand University, in Beyrouth.
Since late 1990s, an obligatory course on Geriatrics & Gerontology has been progressively introduced in all nursing, occupational therapy, and physical therapy schools. This includes 15 to 30 hours of courses with a structured training session in a nursing home. Courses on Geriatrics & Gerontology are also now taught at the Balamand and St Joseph Universities.

LIBYA

Ebtisam Elghblawi, MBBCh, MScRes, ADD, DRH, Tripoli, Libya

Libyan society remains youth dominated; however the size of the ageing population is increasing. The population was estimated in July 2012 to be 6,733,620 of which 4.6% were over 65 years of age. The fertility rate dropped to 2.9 children per mother in 2011, compared to 5.2 in 1990. The median age is now 24 years and rising. With an increased life expectancy, Libya remains a country with a high rate for births compared to deaths (7:1).



Health expenditure in Libya is low compared to other countries at 6.6% of GDP in 2009. Challenges related to aging include a shortage of geriatricians, or physicians trained in geriatrics; curricula of basic and graduate level education lacks aging content; gradates of nursing schools are undertrained and poorly qualified; there is no training in the care of the elderly, and many do not find working with them to be rewarding; health services are poor and expectations unmet; there are no services for the elderly with special needs (age-related disability benefits) and no proper social welfare services; the burden of geriatrics syndromes is high; and accurate is lacking. Furthermore, there are no geriatric wards in hospitals. There are currently only four geriatric centers in the country, offering a free service and funded by the government and donations.
In order to ensure better aging, the following are required: specialized clinics at the level of primary care health centers; trained nurses and specialist doctors; specific geriatric training for clinicians, educators and students; and protocols for geriatric follow-up care.

PAKISTAN

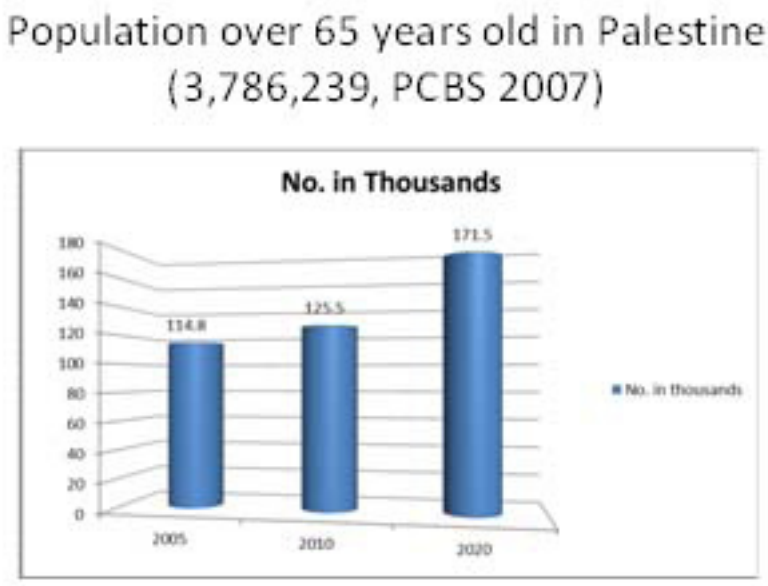
Nasir Mahmood, BSc, MBBS, MPH, National Coordinator, Health of the Elderly, Chakwal District, Pakistan
The population in Pakistan was 149.8 million in 2007. Based on current birth and death rates, and life expectancy (63 years), it is expected that the population will double in 25 years. By 2025, there will be around 27 million persons aged 60 and above. The majority of elderly persons live with their extended families.
There are no special health programs for the elderly in Pakistan. The limited income of the elderly makes access to healthcare and medications complicated. Those who were formerly employed have pensions, but those who were unemployed must resort to their personal savings or charitable institutions. There is a long wait to see a doctor.
Elderly welfare was adopted into the National Health Policy in 1997 and in 2001, the president formed a National Task Force to look into the issues of the elderly in Pakistan. Various measures to increase awareness of elderly healthcare and provide specific training have met with good success including workshops for managers, clinicians, nurses, medical students, politicians and media, and others for healthcare professionals, and publications such as the INTRA Research Project 2005.

Four pillars of plan of action for the elderly of Pakistan include:
• Evidence-based policy and strategy formulation;
• Development of human resources for quality health care;
• Primacy health care as the corner stone of active ageing;
• Creation of multidisciplinary networks to facilitate care of elderly.

PALESTINE

Akram A.O. Amro, MPH, Jerusalem, Palestine

The elderly percentage of the total population is 3.1% in the Palestinian territory, 3.3% in the West Bank compared with 2.6% in the Gaza Strip. The prevalence is higher among females than among males, being 3.5% and 2.6% respectively. The percentage of elderly people is not expected to increase dramatically due to the high fertility rate, especially in Gaza, and should reach around 171,500 by 2020.



In 2010, the proportion of elderly persons suffering from chronic disease was 70.5%. According to 2003 statistics, 42.1% of the elderly live under the poverty line, representing about 4.9% of all poor people in the Palestinian Territory, with significant variation between the West Bank and Gaza strip, where it reached 38.4% and 50.1% respectively.
Elderly citizens (65+ years of age) are among the most vulnerable groups of the Palestinian population and among the least assisted by the government. All programs and initiatives focus on infants and youths. Only 54% of the elderly in the West Bank are covered by health insurance. No real social welfare system exists and support is from the family not the State. The PNA Ministry of Social Affairs gives senior citizens a monthly stipend of 90 NIS (approximately €17/21$). This amount is not enough even to cover a small part of their daily expenses and needs, medications or health insurance.
Many elderly also face the daily difficulty of loneliness due the death of family members or spouses and the lack of loved ones living nearby. This issue has been exacerbated with the ongoing emigration of the young from Palestine.
There is a need to set up programs that focus on improving the quality of life of the elderly through a well integrated program that addresses their social, medical, physical and emotional needs.

QATAR

Marwan Ramadan, RACP, AGSF, ABIM, ABEM, Senior Consultant, Geriatrics, Doha, Qatar

Primary healthcare centers and the Hamad Corporation do not under the authority of the Ministry of Health. Primary HCPs see most of the elderly patients and a home care service will start soon. The Hamad Corporation established the first geriatric unit, which has experienced an explosion in the number of elderly patients (700 px).
In 1996, the MOH decided to introduce a home care program in the Hamad Corporation. Currently, 750 patients are enrolled in this program.
There are no nursing homes per se as this is not allowed for religious reasons. Neither are there any day care centers (these existed 20 years ago but not today); however, these will be redeveloped.
Support of the Government for the elderly is strong (pensions, free medical assistance and equipment at home). The thinking is that the place of the elderly is in their home, not in a hospital, but society is changing and nursing homes will be needed.
Care of severely demented persons is assumed by the family with help from helpers who are provided appropriate training.
The Supreme Council has appointed a committee to prepare a strategy for elderly care for the next 20 years. Much has been done and many decisions made, but implementation is slow.

DUBAI (UNITED ARAB EMIRATES)

Salwa Abdulla Alsuwaidi, MBBS, Dip.Ger., MRCP (UK), Director of the Community Centre for Elderly (CCFE), Dubai Health Authority, Arab Board Internal Medicine

UAE like all other GCC countries has a relatively "young" population. In 2007, the percentage of young people (less than 14 yrs) was 45%, and the percentage of elderly (above 60 yrs) was 5% among locals, and 1.7% among expatriates. The latest official census in 2005 showed that the total number of local elderly people in the UAE was 64, 278, distributed among 7 Emirates. This was 2.5 times the number counted in 1995. This is primarily because of the spectacular increase in life expectancy since the 1960s, which is now the highest in the Middle East.

Healthcare services for the elderly consist of two main forms: long-stay care that is provided in nursing homes and acute care that is provided in hospitals. However, only one hospital has a specialized geriatric unit under the department of internal medicine. Primary Health Care (PHC) centers scattered across the UAE, GPs and family physicians provide medical care to elderly patients. Some PHCs do offer Geriatric Clinics on weekly bases run by geriatricians.

There are two types of elderly homes providing social and medical services in the UAE; the first belong to the Federal Government, and the second to the Local Government of each Emirate.

In May 2011, the Community Development Authority (CDA) in Dubai launched a program to foster, protect and develop Dubai's elderly population by offering services, programs and the necessary care inside their own homes.

Challenges to elderly health services in the UAE include a high numbers of "bed blockers" in the main acute care hospitals, a lack of rehabilitation services (transitional care), slowly developing geriatric services, a lack of local geriatricians, an underdeveloped community service model, and unequal service delivery among the 7 Emirates.

YEMEN

Omar Hussein Fayed Mujalli, Sanaa, Yemen

The current situation is weak due to the economic and political situation. Health care for chronic disease patients is free. Currently there are 4 centers for the elderly in the capital and one nursing home with a capacity of 75 persons.

Challenges include a lack of political support, no specialists, weakness of providing care for all persons, and a lack of communication between various ministries.

Program needs to be set up with a national plan to provide support for elderly health care. It is important to benefit from the experience of other countries.

Awareness needs to be increased via congresses and workshops in the country.

GENERAL COMMENTS

Tawfik A. M. Khoja

Two or three persons should be appointed to represent the group in Seoul.

The person who leads the group should to be experienced, involved in leadership, post-graduate training, CME, and be able to obtain political commitment (support from the Government, and not just the MOH).

Fawzi A. Amin

Each country should think about preparing a poster on the country profile for the Seoul Congress in 2013 (in addition to one on the region).

Bruno Vellas

Countries should apply for Center of Excellence status using the IAGG application form as a model.

Jean-Pierre Michel

Exhibition space should be reserved for the region in Seoul.

Countries should provide within 2 months a list of persons working in the country in geriatric care (for fast-track approval) with a designated leader. Then in Seoul a leader can be designated. IAGG has nothing to say with regard to the choice of leader. "We are not politicians. You will decide who best can represent the group."

Tawfik A. M. Khoja

Countries should meet again to nominate a coordinator for the group.

Jean-Pierre Michel

Maybe it would also be good to meet to discuss EBM guidelines.

Miel Ribbe

Countries should strive to use the same validated screening instruments so that comparisons can be made between countries in the region.

CONCLUDING COMMENTS

Bruno Vellas

The strengths and weaknesses in each country have been seen. It is clear that the IAGG can have a greater influence in the world.

Three categories of the elderly are important for geriatric medicine: the robust; disabled; and the prefail and frail). Identification of the prefrail and frail needs to be implemented in clinical practice.

Work is also being undertaken with GPs to prepare screening tool to identify the frail (i.e. those who have already lost 2

activities of daily living). Successful interventions are available in this population.
There is Governmental support in France to move geriatric medicine in this direction. Even if the size of existing centers to treat the elderly was doubled, they would be full in 5 years. Hence the great need to treat frailty. In Toulouse, for example, a new day hospital is being built to see frail patients. This new center will be in the city center as frail patients are often frightened to travel to university hospitals outside the city.
Press articles have been published to inform the population on frailty in the Southwest of France and this campaign that will be done nationwide, along the same lines as those done in cancer.
Patients are open to this since they agree that they are becoming frail and need assistance to avoid becoming disabled.
More research is needed in each field: in nursing homes for example to identify the early stages of the disease. Early identification will open the way for new treatment strategies. There is thus a need for greater collaboration with GPs.
Toulouse also has an important research center to work on the clinical development of new drugs. Patients come to the center because they know that it participates in drug trials. Participate in trials is important for a center. Being certified as an IAGG Center of Excellence can open the way to receiving additional help from the government. Protocols for participation in trials are available on http://garn-network.org/

Item	UAE	Bh	KSA	Om	Qa	Kw	Ym
Is there a department /division in the MOH for elderly care?	-	Committee	No	Yes	Yes	No*	Yes
Is there a department / division in the directorates of health affairs for elderly care ?	Workteam	No	No	No	No	**	Yes
Is "Health for elderly" integrated within the PHC elements?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are there institutions for training – working medical caders in the health centers on elderly care?	No	No	No	No	Yes	No	No
Are Elderly care programmes included in the curricula of health colleges and institutes as well as post-graduate studies?	-	Yes	to some extent	No	Yes	-	No
Are there departments for elderly care/geriatric in colleges of medicine?	No	No	to some extent	No	-	-	No
Is there a national committee for elderly care?	No	Yes	Yes	No	Yes	No	under establish
Are there community studies / research on elderly?	-	Yes ***	Yes	Yes	Yes	Yes	limited

Appendix 1 Current Situation of Elderly Care in the GCC (Part A)

Item	UAE	Bh	KSA	Om	Qa	Kw	Ym
Hold educational/training activities (workshops, symposia, conferences...) in the filed of Geriatrics	Yes	Yes	Yes	Yes	Yes	Yes	in 2008 plan
Are there societies for care of the elderly?	-	Yes	Yes	No	Yes	-	Yes
Do civil community societies participate effectively in care of the elderly?	Yes	Yes	Yes	No	Yes	Yes	limited role
Is the concept of homecare of the elderly applied?	Yes	Yes	No	Yes	Yes	Yes	No
Are there mobile units for care of the elderly?	No	Yes	to some extemt	No	Yes	Yes	No
Is there a media plan for comprehensive awareness and education about, diseases, care of the elderly and utilizing the experiences of the elderly?	-	**** Yes	No	No	Yes	-	with 2008 plan

* There is Ministerial committee headed by the director of central dept. of PHC and membership of various concerned departments.
** There is a dept. for care of the elderily the Ministry of Social affairs and labour.
*** Requires a comprehensive Gulf and national stady.
**** Within the National strategy of Elderly care.

Appendix 1 Current Situation of Elderly Care in the GCC (Part B)

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