# ME-JAA Middle East Journal of Age and Ageing

### Contents

#### Editorial

#### 1 From the Editor

**A. Abyad** DOI: 10.5742/MEJAA.2018.93288

#### **Original Contribution/Clinical Investigation**

3 Mental health may not have a chronic low-grade inflammatory background on vascular endothelium Mehmet Rami Helvaci, Orhan Ayyildiz, Mehmet Gundogdu, Yusuf Aydin, Abdulrazak Abyad, Lesley Pocock DOI: 10.5742/MEJAA.2018.93289

#### Models and Systems of Elderly Care

- 8 Aging and Exposition to Social Problems in Asia with a Focus on Iran: A Sociological Appraisal Mohammad Taghi Sheykhi DOI: 10.5742/MEJAA.2018.93290
- 16 The Elderly Care Special Interest Group : Opinions and Future Plans Hakan Yaman DOI: 10.5742/MEJAA.2018.93291
- 20 Demographic Changes in the GCC Countries: Reflection and Future Projection Abdulrazak Abyad DOI: 10.5742/MEJAA.2018.93292

Volume 15, Issue 1 February 2018

Chief Editor: A. Abyad MD, MPH, AGSF, AFCHS Email: aabyad@cyberia.net.lb

Publisher: Ms Lesley Pocock medi+WORLD International Australia Email: lesleypocock@mediworld.com.au

Editorial enquiries: aabyad@cyberia.net.lb

Advertising enquiries: admin@mediworld.com.au

While all efforts have been made to ensure the accuracy of the information in this journal, opinions expressed are those of the authors and do not necessarily reflect the views of The Publishers, Editor or the Editorial Board. The publishers, Editor and Editorial Board cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; or the views and opinions expressed. Publication of any advertisements does not constitute any endorsement by the Publishers and Editors of the product advertised.

The contents of this journal are copyright. Apart from any fair dealing for purposes of private study, research, criticism or review, as permitted under the Australian Copyright Act, no part of this program may be reproduced without the permission of the publisher.

## Editorial

#### Dr Abdul Abyad Chief Editor



This is the first issue this year that has a number of paper from Region varying from Metabolic syndrome to elderly care special interest group, social and demographic issues.

Helvaci M.R et al studied consecutive patients between the ages of 15 and 70 years to be able to see possible consequences of under- and excess weight on mental health and to avoid debility induced weight loss in elder individuals. Patients with devastating illnesses and a history of eating disorders were excluded to avoid their possible effects on weight. The study included 971 cases (554 females), totally. Prevalence of underweight, normal weight, overweight, and obesity were detected as 3.7%, 34.9%, 36.1%, and 25.2%, respectively. There were not significant differences between the four groups according to history of depression or current need for a psychiatric consultation for any cause or both (p>0.05 for all). The authors concluded that Metabolic syndrome is a chronic low-grade inflammatory process on vascular endothelium all over the body, terminating with an accelerated atherosclerosis, early aging, end-organ failures, and premature death. Although excess weight is the main determiner factor of the metabolic syndrome, neither under- nor excess weight has any adverse effect on mental health. So mental health may not have a chronic low-grade inflammatory background on vascular endothelium in general.

A paper from Turkey looked at the Elderly Care Special Interest Group of WONCA. Group members consisted of 16 Family Medicine consultants who worked in different health institutions. In the newly initiated group, developing the concept of follow-up of elderly patients in family medicine (%93.8) and preventive measures for elderly needs (%87.5) were suggested mostly for study areas. Developing an approach to elderly care was seen as an opportunity but funding resources for the projects and delays in coordination of the group were mentioned as possible threats. The author conclude that similar elderly care special interest group will certainly emphasize the necessary issues relevant to elderly care.

A paper from Iran looked at Aging and Exposition to Social Problems in Asia with a Focus on Iran. The paper explores how change in demographic structure in Asia since 2000 has enhanced population aging a phenomenon contributing to a variety of social problems in different Asian societies. Increasing median age has created a better chance of higher life expectancy leading to population aging in general. In this way, various social problems including caring, nursing, pensions, homeliness, medication and so on, are left with such aging population. As human beings, we are exposed to increasing problems. We need to devise many policies and practices to take into account to predictably occur in later years such as retirement pensions, medical interventions, social security etc. to help the aging population in various occasions. While the phenomenon is well subtle, it is not easily observed.

A paper from Lebanon looked at demographic Changes in the GCC Countries. The overwhelming demographic and social changes that have changed the six-nation Gulf Cooperation Council (GCC) region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) will continue in the coming decade. The GCC population, total 45 mn people in 2011, less than 1% of the global population. It has one of the fastest-growing populations in the world. By 2020 this population is forecast to increase by one-third, to 53m people. The vast majority 54% will be under 25 years of age. This is estimated to change to about 36 by 2050. The swift growth and the relative youth of the population present serious challenges as well as major opportunities (1).

### Mental health may not have a chronic low-grade inflammatory background on vascular endothelium

Mehmet Rami Helvaci (1) Orhan Ayyildiz (1) Mehmet Gundogdu (1) Yusuf Aydin (1) Abdulrazak Abyad (2) Lesley Pocock (3)

(1) Specialist of Internal Medicine, MD
(2) Middle-East Academy for Medicine of Aging, MD
(3) medi-WORLD International

Corresponding author: Mehmet Rami Helvaci, MD 07400, ALANYA, Turkey Phone: 00-90-506-4708759 Email: mramihelvaci@hotmail.com

#### ABSTRACT

**Background:** Although sedentary lifestyle, excess weight, smoking, alcohol, chronic infection and inflammations, and cancers induced chronic low-grade inflammation on vascular endothelium may shorten human lifespan significantly, there is not enough finding about effects of the inflammatory process on mental health in the literature.

**Methods:** We studied consecutive patients between the ages of 15 and 70 years to be able to see possible consequences of under- and excess weight on mental health and to avoid debility induced weight loss in elder individuals. Patients with devastating illnesses and a history of eating disorders were excluded to avoid their possible effects on weight. History of medications for depression and current need for a psychiatric consultation for any cause according to the general physical examination findings of the Same Internist were detected.

**Results:** The study included 971 cases (554 females), totally. Prevalences of underweight, normal weight, overweight, and obesity were detected as 3.7%, 34.9%, 36.1%, and 25.2%, respectively. There were not significant differences between the four groups according to history of depression or current need for a psychiatric consultation for any cause or both (p>0.05 for all).

**Conclusion:** Metabolic syndrome is a chronic lowgrade inflammatory process on vascular endothelium all over the body, terminating with an accelerated atherosclerosis, early aging, end-organ failures, and premature death. Although excess weight is the main determiner factor of the syndrome, neither under- nor excess weight has any adverse effect on mental health. So mental health may not have a chronic low-grade inflammatory background on vascular endothelium in general.

**Key words:** Mental health, metabolic syndrome, endothelial inflammation, body mass index

Please cite this article as: Helvaci M. et al. Mental health may not have a chronic low-grade inflammatory background on vascular endothelium. *Middle East Journal of Age and Aging* . 2018; 15(1):3-7. DOI: 10.5742/MEJAA.2018.93289

Middle East Journal of Age and Ageing Volume 15, Issue 1, February 2018

#### Introduction

Due to the prolonged survival of human beings, systemic atherosclerosis may be the major health problem in this century, and its association with physical inactivity, excess weight, smoking, and alcohol is collected under the heading of metabolic syndrome (1, 2). The syndrome is characterized by a low-grade chronic inflammatory process on vascular endothelium all over the body (3). The inflammatory process is particularly accelerated by some factors including sedentary lifestyle, excess weight, smoking, alcohol, chronic inflammation and infections, and cancers (4, 5). The syndrome can be slowed down with appropriate nonpharmaceutical approaches including lifestyle changes, diet, exercise, cessation of smoking, and withdrawal of alcohol (6). The syndrome contains reversible indicators including overweight, white coat hypertension, impaired fasting glucose, impaired glucose tolerance, hyperlipoproteinemias, alcohol, and smoking for the development of irreversible consequences including obesity, hypertension (HT), type 2 diabetes mellitus, chronic obstructive pulmonary disease, cirrhosis, chronic renal disease, peripheric artery disease, coronary artery disease (CAD), and stroke (7, 8). In another perspective, the metabolic syndrome may be the most important disease of human lifespan decreasing its quality and duration at the moment. The syndrome has become increasingly common all over the world, for instance 50 million people in the United States are affected (9). The syndrome induced accelerated atherosclerotic process all over the body may be the leading cause of early aging, end-organ failures, and premature death for both genders. For example, CAD is the leading cause of death in developed countries. Although the absolute negative effects of excess weight on physical health (10), there are various reports about relationships between body mass index (BMI) and depression or psychiatric disorders including anxiety and somatoform disorders in the literature (11-13). We tried to understand whether or not there is a relationship between excess weight and mental health.

#### **Materials and Methods**

Due to the prolonged survival of human beings, systemic atherosclerosis may be the major health problem in this century, and its association with physical inactivity, excess weight, smoking, and alcohol is collected under the heading of metabolic syndrome (1, 2). The syndrome is characterized by a low-grade chronic inflammatory process on vascular endothelium all over the body (3). The inflammatory process is particularly accelerated by some factors including sedentary lifestyle, excess weight, smoking, alcohol, chronic inflammation and infections, and cancers (4, 5). The syndrome can be slowed down with appropriate nonpharmaceutical approaches including lifestyle changes, diet, exercise, cessation of smoking, and withdrawal of alcohol (6). The syndrome contains reversible indicators including overweight, white coat hypertension, impaired fasting glucose, impaired glucose tolerance, hyperlipoproteinemias, alcohol, and smoking for the development of irreversible consequences including obesity, hypertension (HT), type 2 diabetes mellitus, chronic obstructive pulmonary disease, cirrhosis, chronic renal disease, peripheric artery disease, coronary artery disease (CAD), and stroke (7, 8). In another perspective, the metabolic syndrome may be the most important disease of human lifespan decreasing its quality and duration at the moment. The syndrome has become increasingly common all over the world, for instance 50 million people in the United States are affected (9). The syndrome induced accelerated atherosclerotic process all over the body may be the leading cause of early aging, end-organ failures, and premature death for both genders. For example, CAD is the leading cause of death in developed countries. Although the absolute negative effects of excess weight on physical health (10), there are various reports about relationships between body mass index (BMI) and depression or psychiatric disorders including anxiety and somatoform disorders in the literature (11-13). We tried to understand whether or not there is a relationship between excess weight and mental health.

#### Results

The study included 971 cases (554 females and 417 males), totally. There were only thirty-six cases (3.7%) in the underweight group. Prevalence of the cases with normal weight, overweight, and obesity were detected as 34.9% (339 cases), 36.1% (351 cases), and 25.2% (245 cases), respectively. Mean ages of the groups showed gradual and highly significant increases from the underweight towards the obesity groups (24.4, 32.4, 43.5, and 49.1 years, respectively, p<0.001 nearly for all). The prominent but nonsignificant difference between the underweight and normal weight groups according to the mean age may just be due to the smaller sample size of the underweight group. So aging alone may be the main determinator factor of excess weight. Additionally, female ratios were detected as 61.1%, 51.3%, 47.0%, and 78.7% in the underweight, normal weight, overweight, and obesity groups, respectively. So there was a significant female predominance of the obesity group (p<0.001). On the other hand, when we compared the four groups according to history of medications for depression or current need for a psychiatric consultation for any cause, or both, there were not statistically significant differences between them (p>0.05 for all) (Table 1).

#### Discussion

Probably obesity is found among one of the irreversible endpoints of the metabolic syndrome, since after development of obesity, nonpharmaceutical approaches provide limited benefit either to heal obesity or to prevent its complications. Overweight and obesity probably lead to a chronic low-grade inflammation on vascular endothelium that is associated with many coagulation and fibrinolytic abnormalities suggesting that excess weight may cause a prothrombotic and proinflammatory state (15). The chronic inflammatory process is characterized by lipid-induced injury, invasion of macrophages, proliferation of smooth muscle cells, endothelial dysfunction, and increased atherogenicity (16, 17). Elevation of C-reactive protein (CRP) levels in serum carries predictive power for the development of atherosclerotic end-points (18, 19), and overweight and obesity are considered as strong factors for controlling of CRP concentration in serum, because adipose tissue produces biologically active leptin, tumor necrosis factor-alpha, plasminogen activator inhibitor-1, and adiponectin. So adipose tissue is involved in the regulation of cytokines, and individuals with overweight and obesity have elevated CRP levels in serum (20, 21). On the other hand, individuals with excess weight will have an increased circulating

blood volume as well as an increased cardiac output. Table 1: Characteristics of the study cases thought to be the result of increased oxygen demand of the extra tissue. The prolonged increase in circulating blood volume may lead to myocardial hypertrophy and decreased compliance, in addition to the common comorbidity of atherosclerosis and HT. In addition to the atherosclerosis and HT, fasting plasma glucose and serum total cholesterol levels were all elevated with the increased BMI values (22). Similarly, prevalence of CAD and ischemic stroke increased with an elevated BMI value in another study (23). On the other hand, the chronic low-grade inflammatory process may also cause genetic changes on the epithelial cells, and the systemic atherosclerotic process may decrease clearance of malignant cells by the immune system, effectively (24). Eventually, the risk of death from all causes including cardiovascular diseases and cancers increased throughout the range of moderate and severe weight excess for both genders in all age groups (25).

Although the higher BMI is associated with higher prevalence of atherosclerotic end-points, there are various reports about its association with psychiatric disorders . Some reports suggest the presence of associations between atherosclerotic consequences and psychiatric disorders, and these associations may increase the likelihood of health service utilization and length of stay in treatment programs (26). Mental health tended to be related with the BMI (27), and there was a higher prevalence of mental disorders among general practice patients showing a BMI of 30 kg/m2 or higher (28). Similarly, obesity was related with the increased rates of mental disorders in women between the ages of 18 and 25 years (29). Additionally, people with a BMI of 30 kg/m2 or higher showed higher odds for depression in a study performed among 50 to 94 year olds from Alameda County (30). In another study, obesity was associated with a 37% increase in the probability of being diagnosed with major depression in women, while with a decrease of similar magnitude in men (13). The positive association between the relative body weight and probability of major depression among adult women was additionally shown with some previous studies by using subclinical indexes of psychological well-being (31, 32). Similarly, individuals with a lifetime history of major depression were more likely to have obesity (19% versus 15%, respectively, p<0.001), and lifetime major depression was associated with higher odds of obesity in female respondents, whereas not in male respondents as a result of sex-specific multivariate analysis (33). In another study, obesity was associated with significant increases in lifetime diagnosis of major depression, bipolar disorder, and panic disorder or agoraphobia (34). Additionally, a 10-unit increase of BMI increased the risk of past-year suicide thought and attempts by 22% in females, however, reduced the risk by 26% and 55%, respectively, in males (13). An interesting finding among men may be the association between being underweight and having an increased probability of clinical depression and suicidal tendencies. The relationship between lower BMI and depression was previously demonstrated in a community sample of young

Variables	Underweight	<i>p-</i> value	Normal weight	p-value	<i>p</i> -value Overweight	p- value*	Obesity
Number	36 (3.7%)		339 (34.9%)		351 (36.1%)		245 (25.2%)
<u>Mean aqe</u> (year)	<u>24.4±8.5 (15-61)</u>	Nst	<u>32.4±13.3(15-69)</u>	<0.001	<u>43.5 ± 13.2 (15-70)</u>	<0.001	<u>49.1 ± 10.6 (19-70)</u>
Female ratio	61.1%	Ns	51.3%	Ns	47.0%	<0.001	78.7%
Depression history	25.0%	Ns	26.8%	Ns	26.4%	Ns	25.3%
A psychiatric consultation need	8.3%	Ns	13.8%	Ns	15.0%	Ns	11.4%
Depression history and/or a psychiatric consultation need	33.3%	Ns	35.6%	Ns	37.6%	Ns	33.4%

\*Value between normal weight and obesity \*Nonsignificant (p>0.05)

males (35). When the authors analyzed weight status as a categorical variable, the underweight men were 81% more likely to have thoughts about suicide, 77% were more likely to have attempted suicide, and 25% more likely to be clinically depressed than average-weight men (13). According to the above study performed on 2,064 women aged between 18 and 25 years in Germany, obese women suffered from an anxiety disorder significantly more often (29). Eventually, according to a current review, the most rigorous clinical studies suggest those children and adolescents with major depressive disorder may be at increased risk for developing overweight, patients with bipolar disorder may have elevated rates of overweight, obesity, and abdominal obesity, and obese individuals desiring weight-loss therapy may have elevated rates of depressive and bipolar disorders (36). According to the same review, the most rigorous community studies suggest those depression patients with atypical symptoms in females is significantly more associated with overweight, obesity is associated with major depressive disorder in females, and abdominal obesity may be associated with depressive symptoms in both genders, but most overweight and obese individuals in the community do not have mood disorders (36). On the other hand, similar to our results, another survey study did not find a relationship between higher BMI and general psychopathology by using the Diagnostic and Statistical Manual for Mental Disorders IV criteria based on the Composite International Diagnostic Interview, and this study was conducted with a general population sample of 3,021 German subjects ranging from 14 to 24 years of age and controlled for eating disorders (12). There was not any significant association between the higher BMI and mood, anxiety, substance use, and somatoform disorders (12). Additionally, neither obesity nor underweight was significantly associated with any kind of general psychopathology (12). In another study, although authors found a statistically significant relationship between higher BMI and physical health, they could not between the higher BMI and psychosocial outcomes such as poorer emotional, school, or social functioning (37). Additionally, obesity was associated with significantly lower lifetime risk of substance use disorder both in males and females (34). So although the sedentary lifestyle, excess weight, smoking, alcohol, chronic infection and inflammation, and cancers induced chronic low-grade inflammatory process on vascular endothelium all over the body may shorten the human lifespan significantly, there is not any significant association between the inflammatory process and mental health in general.

In the absence of any chronic low-grade inflammatory background of mental health on vascular endothelium, our results about the effects of under- and excess weight on mental health may also be explained by the self-admiring properties of the human being. Human beings believe that their features are the best for themselves. He or she is created as the best, and he or she is actually the wonderful person in the world. Their height, weight, and intelligence are actually the optimum for themselves. Thus he or she is afraid of changing image or body compositon, actually. This property may be necessary for human beings to be able to live and fight against various stresses during their lifespan. In the absence of this property, human beings may not be able to fight against various stresses and continue to survive during their lifespan, and they may desire to terminate their lives frequently. So although the self-admiring property of human beings seem bad, it may be absolutely necessary to be able to continue his or her life in this stressful world.

As a conclusion, metabolic syndrome is a chronic low-grade inflammatory process on vascular endothelium all over the body, terminating with an accelerated atherosclerosis, early aging, end-organ failures, and premature death. Although excess weight is the main determining factor of the syndrome, neither under- nor excess weight has any adverse effect on mental health. So mental health may not have a chronic low-grade inflammatory background on vascular endothelium in general.

#### References

1. Eckel RH, Grundy SM, Zimmet PZ. The metabolic syndrome. Lancet 2005; 365: 1415-1428.

2. Grundy SM, Brewer HB Jr, Cleeman JI, Smith SC Jr, Lenfant C. Definition of metabolic syndrome: Report of the National Heart, Lung, and Blood Institute/American Heart Association conference on scientific issues related to definition. Circulation 2004; 109: 433-438.

3. Tonkin AM. The metabolic syndrome(s)? Curr Atheroscler Rep 2004; 6: 165-166.

4. Helvaci MR, Kaya H, Seyhanli M, Cosar E. White coat hypertension is associated with a greater all-cause mortality. J Health Sci 2007; 53: 156-160.

5. Helvaci MR, Kaya H, Duru M, Yalcin A. What is the relationship between white coat hypertension and dyslipidemia? Int Heart J 2008; 49: 87-93.

6. Helvaci MR, Aydin LY, Aydin Y. Chronic obstructive pulmonary disease may be one of the terminal end points of metabolic syndrome. Pak J Med Sci 2012; 28: 376-379.

7. Helvaci MR, Kaya H, Gundogdu M. Gender differences in coronary heart disease in Turkey. Pak J Med Sci 2012; 28: 40-44.

8. Helvaci MR, Seyhanli M. What a high prevalence of white coat hypertension in society! Intern Med 2006; 45: 671-674.

9. Clark LT, El-Atat F. Metabolic Syndrome in African Americans: implications for preventing coronary heart disease. Clin Cardiol 2007; 30: 161-164.

10. Allison DB, Pi-Sunyer FX. Obesity treatment: examining the premises. Endocr Pract 1995; 1: 353-364.

11. de Graaf R, Bijl RV, Smit F, Vollebergh WA, Spijker J. Risk factors for 12-month comorbidity of mood, anxiety, and substance use disorders: findings from the Netherlands Mental Health Survey and Incidence Study. Am J Psychiatry 2002; 159: 620-629.

12. Lamertz CM, Jacobi C, Yassouridis A, Arnold K, Henkel AW. Are obese adolescents and young adults at higher risk for mental disorders? A community survey. Obes Res 2002; 10: 1152-1160.

13. Carpenter KM, Hasin DS, Allison DB, Faith MS. Relationships between obesity and DSM-IV major depressive disorder, suicide ideation, and suicide attempts: results from a general population study. Am J Public Health 2000; 90: 251-257.

14. Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) final report. Circulation 2002; 106: 3143-3421.

15. De Pergola G, Pannacciulli N. Coagulation and fibrinolysis abnormalities in obesity. J Endocrinol Invest 2002; 25: 899-904. 16. Ross R. Atherosclerosis: An inflammatory disease. N Engl J Med 1999; 340: 115-126.

17. Ridker PM. High-sensitivity C-reactive protein: Potential adjunct for global risk assessment in the primary prevention of cardiovascular disease. Circulation 2001; 103: 1813-1818.

18. Ridker PM. High-sensitivity C-reactive protein and cardiovascular risk: rationale for screening and primary prevention. Am J Cardiol 2003; 92: 17-22.

19. Danesh J, Collins R, Appleby P, Peto R. Association of fibrinogen, C-reactive protein, albumin, or leukocyte count with coronary heart disease: meta-analyses of prospective studies. JAMA 1998; 279: 1477-1482.

20. Visser M, Bouter LM, McQuillan GM, Wener MH, Harris TB. Elevated C-reactive protein levels in overweight and obese adults. JAMA 1999; 282: 2131-2135.

21. Funahashi T, Nakamura T, Shimomura I, Maeda K, Kuriyama H, Takahashi M, et al. Role of adipocytokines on the pathogenesis of atherosclerosis in visceral obesity. Intern Med 1999; 38: 202-206.

22. Zhou B, Wu Y, Yang J, Li Y, Zhang H, Zhao L. Overweight is an independent risk factor for cardiovascular disease in Chinese populations. Obes Rev 2002; 3: 147-156.

23. Zhou BF. Effect of body mass index on all-cause mortality and incidence of cardiovascular diseases--report for metaanalysis of prospective studies open optimal cut-off points of body mass index in Chinese adults. Biomed Environ Sci 2002; 15: 245-252.

24. Helvaci MR, Aydin Y, Gundogdu M. Smoking induced atherosclerosis in cancers. HealthMED 2012; 6: 3744-3749.

25. Calle EE, Thun MJ, Petrelli JM, Rodriguez C, Heath CW Jr. Body-mass index and mortality in a prospective cohort of U.S. adults. N Engl J Med 1999; 341: 1097-1105.

26. Wells KB, Golding JM, Burnam MA. Psychiatric disorder in a sample of the general population with and without chronic medical conditions. Am J Psychiatry 1988; 145: 976-981.

27. Sturm R, Wells KB. Does obesity contribute as much to morbidity as poverty or smoking? Public Health 2001; 115: 229-235.

28. Kendrick T. Cardiovascular and respiratory risk factors and symptoms among general practice patients with long-term mental illness Br J Psychiatry 1996; 169: 733-739.

29. Becker ES, Margraf J, Turke V, Soeder U, Neumer S. Obesity and mental illness in a representative sample of young women. Int J Obes Relat Metab Disord 2001; 25: 5-9.

30. Strawbridge WJ, Deleger S, Roberts RE, Kaplan GA. Physical activity reduces the risk of subsequent depression for older adults. Am J Epidemiol 2002; 156: 328-334.

31. Istvan J, Zavela K, Weidner G. Body weight and psychological distress in NHANES I. Int J Obes Relat Metab Disord 1992; 16: 999-1003.

32. Han TS, Tijhuis MA, Lean ME, Seidell JC. Quality of life in relation to overweight and body fat distribution. Am J Public Health 1998; 88: 1814-1820.

33. McIntyre RS, Konarski JZ, Wilkins K, Soczynska JK, Kennedy SH. Obesity in bipolar disorder and major depressive disorder: results from a national community health survey on mental health and well-being. Can J Psychiatry 2006; 51: 274-280.

34. Simon GE, Von Korff M, Saunders K, Miglioretti DL, Crane PK, van Belle G, et al. Association between obesity and psychiatric disorders in the US adult population. Arch Gen Psychiatry 2006; 63: 824-830.

35. Friedman MA, Brownell KD. Psychological correlates of obesity: moving to the next research generation. Psychol Bull 1995; 117: 3-20.

36. McElroy SL, Kotwal R, Malhotra S, Nelson EB, Keck PE, Nemeroff CB. Are mood disorders and obesity related? A review for the mental health professional. J Clin Psychiatry 2004; 65: 634-651.

37. Swallen KC, Reither EN, Haas SA, Meier AM. Overweight, obesity, and health-related quality of life among adolescents: the National Longitudinal Study of Adolescent Health. Pediatrics 2005; 115: 340-347.

#### Models and Systems of Elderly Care

### Aging and Exposition to Social Problems in Asia with a Focus on Iran: A Sociological Appraisal

#### Mohammad Taghi Sheykhi

#### Correspondence:

Dr. Mohammad Taghi Sheykhi, Professor of Sociology, Department of Social Science, Alzahra University, Tehran, Tel: 009821-22859416, **E-mails:** mtshykhi@alzahra.ac.ir, mtshykhi@yahoo.com

#### ABSTRACT

The paper explores how change in demographic structure in Asia since 2000 has enhanced population aging - a phenomenon contributing to a variety of social problems in different Asian societies. Increasing median age has created a better chance of higher life expectancy leading to population aging in general, bBut many Asian countries do not know how to cope with the phenomenon. Yet, and in increasing cases major institutions of society - governments, economies, and families loosely respond to the aging of a large number of individuals. In this way, various social problems including caring, nursing, pensions, homeliness , medication and so on, are caused by such aging populations. As human beings, we are exposed to increasing problems. We need to devise many policies and practices to take into account what will predictably occur in later years such as retirement pensions, medical interventions, social security etc. to help the aging population in various situations. While the phenomenon subtle, it is not easily observed.

**Key words:** Population aging, Asian societies, Social problems, Median age, Life expectancy.

Please cite this article as: Mohammad Taghi Sheykhi. Aging and Exposition to Social Problems in Asia with a Focus on Iran: A Sociological Appraisal. Middle East Journal of Age and Aging. 2018; 15(1):8-15. DOI: 10.5742/MEJAA.2018.93290

#### References

In the present paper, the author tries to explore and reflect the phenomenon of aging comparatively in Asia. While the world is aging at an unprecedented pace, the outcomes are not the same in all regions. However, while it took Europe to double the proportion of its elderly population from 7 to 14 percent almost within a century, the same change is appearing in Asian countries such as Japan, South Korea, Singapore, Iran and the like in a shorter span of time. Overall, population aging is one of the major achievements of the 20th century, but it needs appropriate sociological assessment. Aging in Asian settings, it has in recent decades become an important topic of discussion at many colloquiums at national and international levels. While aging is an issue of high priority within many Western societies, different aspects of the phenomenon are yet to find their importance in many parts of Asia as well. The extreme population aging in the West as well as in many parts of Asia has led, and is yet leading to increase the demand for further social and health services etc. Issues stemming from family relations, health services, retirement, and economic well-being of the aging population are sociologically appraised in the present article. Age-related topics are studied, and the demographic profiles highlight the relevant issues of the phenomenon. The scenario leads to new challenges particularly in Asia where the history of aging is not too old. We will see how aging affects the quality of life in all areas. Asia, with a larger population, and larger young population structure, will experience aging even faster than the West. While aging is in process in Asia, "elderly aging" or aging beyond a hundred years or so, is in process in the West. However, per capita income, elderly's rate of literacy, financial resources of the elderly etc. all affect the quality of life of the aging population too.

Age, is a characteristic that every society uses to move people into and out of status, roles, rights and obligations, is reflected differently in various societies. The process of creating social categories based on age is known as age grading and aging, and varies from culture to culture , and from one historical period to another. We will see as to how changes in proportion of people in a population at each age level has important social consequences in different societies. One of our objectives in this paper is to find out the connotation of such changes in Asia. Population aging or graying due to increased longevity, and a declining birth rate, is more prevalent in the industrial world rather than the developing world. The paper finds out how due to change in population structure, population aging will immediately change trends in the decades ahead with special reference to Asia.

Population aging as an unprecedented phenomenon in human history and is increasingly observed in the developed and the developing world, leaving behind social, economic, health and other problems. Currently, increase in the proportions of the elderly (60 years and older), accompanied by decline in the proportions of the young age groups (under the age of 15), have created various problems, or are potentially responsible for challenges in different dimensions. According to projections, by the year 2050, the number of older persons in the world will exceed the number of the young for the first time in history (Pop Newsletter, 2001). Such a scenario will lead to new challenges in human life. However, by 1998, this historical reversal in relative proportions of the young and the old has already taken place in more developed regions.

The phenomenon of aging, being pervasive, is affecting each and every one of us in every society irrespective of age and sex. It has a direct bearing on the intergenerational equity and solidarity which are the very foundations of societies. Hence quality of life has been widely affected, due to this current situation.

Likewise, the consequences and implications of aging are reflected in all facets of life, such as, affecting the quality of life in all areas. For example, in the economic area, population aging will have impacts on economic growth, saving, investment, consumption, labor market, pensions, taxation etc. Also, in the social sphere, aging affects health and health care, family composition, living arrangements, housing etc. All these factors and even more, inevitably affect various dimensions of quality of life.

However, the trend towards aging is largely irreversible in the decades to come simply as a result of demographic transition taking place in the world in which fertility and mortality both have decreased in an unprecedented manner.

According to UN estimates, the world added approximately 600 million older persons to its population at the turn of the century, i.e. almost 3 times the number it had in the mid 20th century. However, by the mid 21st century, the world elderly will again triple -reaching 2 billion. Such a great change in population structure, needs more attention, more relevant resources, and more appropriate planning.

Though the developed regions experienced aging earlier, yet the less developed regions including Asia are following the same path. In the more developed world in particular in Western Europe, almost one fifth of the population was estimated to be aged 60 years and older in the year 2000. By the year 2050, this proportion is projected to reach one third. On the other hand, while only about 8 percent of the population in Asia is currently over the age of 60, this proportion will increase to 20 percent by the mid 21st century. Such a dramatic change will need relevant and appropriate infrastructure to be able to handle the Asian aging population, and to be adequately responsive to the quality-of-life needs of the emerging elderly.

As the speed of population aging is much faster in Asia as compared with Europe, and the whole developed world, Asia has much more to do, to adjust to the consequences of such population aging. Likewise, population aging in Asia is taking place at much lower levels of socio-economic development than was the case in Europe in the mid 20th century.

Demographically speaking, in 2000, the median age for the world was 26 years. The country with the youngest population is Yemen, with a median age of 15 years, and the oldest is Japan, with the same indicator of 41 years. By 2050, the world median age is projected to have increased by about 10 years i.e., to 36 years. The country with the youngest population at that time is predicted to be Nigeria in Africa, with a median age of 20 years, and the oldest is expected to be Spain, with a median age

of 55 years by that year (Pop Newsletter,2001). Such a change will give a different perspective to the aging population so far as their quality of life is concerned.

A new phenomenon of the "elderly aging" is also growing, and it is estimated that those aged 80 years, are currently increasing at the rate of 3.8 percent per annum, and the number of which comprises more than one tenth of the total number of older persons. Under such conditions, one fifth of the older persons will be 80 years and older by the mid 21st century. Such a scenario indicates that the dependency burden on working-age groups (15-46) will be remarkable and heavy.

While the majority of the aging population are women, more due to the fact that the female life expectancy is higher than men, as estimated in the year 2000, there were 36 million more women than men aged 60 years and above. Also, as the ratio will have more change/ gap at the age of 80 and above, i.e. almost two men for every five women, more specific plans should be implemented so as to protect the quality of life of such potentially vulnerable people.

So far as income is concerned, countries with higher per capita income tend to have lower rates of elderly participation, and on the contrary, to a greater extent, older people participate in labor markets in the less developed regions including Asia largely due to the limited coverage of retirement schemes, and the small incomes when provided. Therefore, many have to work even at the ages not suitable and recommended for their physical conditions, which eventually leads to poor quality of life among them.

Another factor responsible for low quality of life among the elderly is known as illiteracy. Though a lot of efforts have been made to eradicate illiteracy, yet it is common especially among the Asian elderly. According to estimates, almost half of all the people 60 years and above in the less developed regions including Asia have been declared as illiterate by the year 2000. Only about 1/3 of older women and three fifths of the older men could read and write at basic level, whereas in Europe, literacy has almost approached full coverage except in some countries.

In the study of older people in modern society, growing attention has been focused on their life-satisfaction and quality of life (Tinker, 1983 and Hughes,1990). Life-satisfaction is related to the degree to which people feel they achieve their aspirations, morale and happiness. But, how quality of life is measured is difficult to decide. In a nutshell, ways of measuring quality of life of the elderly people could include: their individual characteristics, their physical and mental health, their dependency, their housing, their social environment, their comforts, security etc. However, to develop a system of health care and security for the elderly, paying special attention to the needs of the women is highly recommended with a view to enhancing the ability of families to take care of the elderly people within their families in general.

#### Method of Research

Methodology used in the present article is of qualitative type, in that, various paradigms for finding facts have been used. Qualitative research usually studies the people in their natural setting. In finding facts for the research, the researcher engaged in careful data collection and thoughtful analysis of what was relevant. In the documentary research applied in the present article, printed and written materials were widely regarded. The research was performed as a qualitative library type in which the researcher had to refer to relevant and related sources. In the present research, various books on aging were thoroughly investigated, and the needful inferences were made. The data =used by the investigator in the present research is dependable and reliable. Though literature on Iranian aging is very limited, yet the author has tried to investigate many foreign resources as well, in order to elicit the necessary information in order to build up the text.

#### **Old Age Crisis**

While the age of retirement is lowering in many parts of the developing world due to large number of young people waiting to get into jobs, it is in contrast increasing in the Western world especially in (EU) due to increase in the number of the aging people and lack of youth to enter into active production sector. However, the emerging problem is somehow currently being solved within many European countries by attracting guest workers from the developing countries.

Systems of financial support for old people are in trouble worldwide. To ensure that, these systems continue to protect the old, and promote economic growth, countries need to consider comprehensive pension reforms. Based on estimates, over the next 25 years, the proportion of the world's population over 60 will nearly double, i.e. from 9 percent to 16 percent. However, populations are aging much faster in developing countries than they did in industrial countries. As today's young workers near retirement around the year 2030, 80 percent of the world's old people will live in what today are developing countries (mainly Asian). More than half will live in Asia, and more than a quarter in China alone (Finance & Development, 1995). These countries need to develop their old-age systems quickly, and make them sufficiently resilient to withstand rapid demographic change. Under the conditions that the extended family system and village support networks on which two-thirds of the world's old people depend, tend to break down due to pressures of urbanization, industrialization and rapid socio-cultural mobility, the elderly people come to be at a loss. As a result of all these factors, old-age systems are in serious financial trouble. However, the situation happens to be more acute in Asia.

#### **Challenges Emerging**

In traditional communities, work and organizational structure of family were inter-connected. Relations and contacts within age groups were close, and there was mutual dependence between the young and the elderly groups. Such close connections and exchange of functions between generations within the family network ensured the survival of elderly people where there were no other forms of guaranteed social support in old age. The type of network allowed the elderly to have enough authority and participate in family functions based on family division of labor. However, industrialization and the process of social change in both Asia and Europe have led to social differentiation of age groups with reference to economic functions, official retirement and other such conditions.

Currently, due to the modernization of societies in different educational, scientific and technical respects, the younger generations are capable of providing for themselves. Therefore, the older generations are left isolated and dependent on pensions and other kinds of social help. This process eventually promotes relative independence of generations from each other, diminishes the necessity for cooperation and results in the destruction of family solidarity and mutual dependence. Therefore, in modern societies, responsibility for the elderly is more and more becoming formal and depersonalized. Under such networks, the elderly people do not play their former roles. They depart from the family, i.e. not carrying out the role of the grandparents, and the younger generations tend to less require the support of the elderly (Aleksandrova,1974)

#### Socio-economic Effects of Aging

The inevitable harmful social and economic effects of aging are becoming obvious more than ever before with special reference to Asia. Most prominent among the concerns that are being voiced with respect to aging is how to fund social security programs in the face of increasing numbers of retired persons, and how to pay for rising health care costs generated by the elderly people (Mullan, 2000). These concerns have at times, led to the conclusion that population aging is bound to be more a catastrophic drain on economic resources. Actually speaking, while the Western (European) countries are and will continue to be rather well equipped to handle the present and projected increase in the older population, yet the emergence of the elderly's social problems is something more recent. The whole scenario is more problematic for Asian countries rather than the Western European ones, wherein there are shortages of necessary infrastructure, and the societies that are rapidly changing to new cultural forms. Thus, the Asian elderly are much more socially and economically insecure in different dimensions.

Living in a demographically diverse world, has also led to unprecedented aging change too. While the global population increased by 2 billion during the last quarter of the 20th century; reaching 6 billion in 2000, resources have not increased that much to respond to the increasing elderly with special reference to Asia. As projected, the population will increase by another 2 billion during the first decades of the 21st century, and as nearly all the increase has been, and will be in the developing countries including Asia, aging problems will emerge more than ever before in the region.

We, as living in a world of unprecedented demographic diversity, should be more cautious, and planning-minded. As the traditional demographic groupings of countries are breaking down, more socio-economic problems of the aging populations are emerging. Over the next 25 years, increases in population in South Asian and the Middle East are expected to be larger than the past quarter of the century. In contrast, in European countries, and in East Asia, population growth has slowed or stopped, and rapid population aging has become a serious concern (Population and Development Review, 2002). Increasing levels of aging accompanied by increasing mobility and urbanization, are affecting economic and social outlooks of many countries.

The challenges found due to such diversities require adequate responses. The most urgent of these, occur where rapid population growth, high levels of poverty, and low level of economic growth coincide. Under such conditions the elderly face various problems.

#### The Elderly Vulnerability

Deteriorating environmental conditions and extreme events do not affect all countries and populations in the same way. Hence, many factors contribute to their vulnerability including poverty, poor health, low levels of education, gender inequality, lack of access to resources and services, and unfavorable geographical locations. All these, somehow or other affect the elderly people more in Asia rather than the West. Under the conditions wherein the populations in general are socially disadvantaged or lack political voice, the elderly people in particular are also at greater risk. Vulnerable aging populations include the poorest, the least empowered segments and especially the women. These vulnerable aging persons have limited capacity to protect themselves from current and future environmental and social hazards, such as polluted air and water, catastrophes, and the adverse consequences of large-scale environmental change such as biodiversity loss, climate change etc.

To ease and solve the problems of the elderly people especially in the Asian context, more interdisciplinary research and education addressing the above topics is necessary at all levels. The different disciplines should also conduct their studies in ways that make the result mutually accessible to the elderly.

#### The Older Widows

The aged members, especially old women, face a serious situation in today's family structure. The demographic scenario of aging indicates a rise in the longevity of women (Desai et.al., 2003). As the proportion of the elderly people increases in the society, the increasing proportion of widows and widowers too, is very likely to emerge. Comparing the proportion of widows with the widowers, the number of the former is higher due to the fact that women marry earlier than men, and also they tend to outlive men. Similarly, after the ages of 60, women have the chance of longer life. The chance of remarriage for men in their later life keeps the proportion of widowers lower than the widows almost everywhere. However, the consequences of widowhood leading to isolation and loneliness is more faced by the women rather than men.

Research shows that widowhood appears as an effect of marital dissolution worldwide. Apart from divorce, it in most cases happens as a natural event due to the death of a spouse. In both cases, women tend to suffer longer term of negative social and economic consequences, while men do not (Neubeck et.al. 1996, 478).

In spite of recognizing the problems faced by the elderly widows in many parts of Asia, governments are not ready to take more responsibility, but want the individual family to help its members in a crisis situation such as widowhood. The challenges faced by the widows towards the end of the 20th century, have aggravated even today among large number of widows. To solve and improve the problem, assistance, cooperation and contributions of different institutions are required.

#### **Theoretical Context of Aging**

Aging as a transition in life course is fundamentally different from other ascribed statuses, such as race and gender. Being black or white, male or female and the like is a lifelong status, except in rare cases. Age, in contrast, is a transitional status because people periodically move from one age category to another. This process of a person moving through the life course from birth to death, is called aging.

As people age, they face different sets of expectations and responsibilities, enjoy different rights and opportunities, and possess different amounts of power and control. Consequently, transitions from one age status to another are societally important (Keller,1994). They are often marked by rites of passage, and public ceremonies, i.e. full of ritual symbolism that record the transition being made. Weddings, retirement dinners, funerals etc. are all examples of rites of passage in an industrial society. It is somehow or other different in different societies. To better understand the aging process, the five key sociological concepts will be helpful as we explore further the ideas of age, aging, and age structure with Asian and European connotations. Age structure is a specific element of the social structure of all human societies, that helps a society in allocating its resources. Also, historical or cultural differences in age structure create different contexts for social action by individuals and groups. Changes in age structure also bring about problems of functional integration. Different proportions of age groups in a population affect power too, such as age for voting etc. Discussion of the meanings of age connotation in different societies is different from one culture to another.

Generally speaking, age shapes the flow of people into and out of social roles and statuses (social networks), and the rights and responsibilities that go with them, which is different from one society to another. Age also organizes the distribution of valued resources in a society such as money, power and prestige (O'Rand, 1990).

From the point of view of conflict theory, old people became a social problem when those in power in the industrial world found it advantageous to push them aside. As the industrial revolution spread out more than a hundred years ago, managers of big businesses found old people a nuisance. At that time, they drew more wages than young workers who wanted the jobs of older workers. As older workers were pushed out of their jobs, the percentage of those over 60 who worked, declined steadily. As the aged lost out to younger groups with new technical and institutional resources, the meaning of: to retire changed from "to withdraw from public notice" to " to be no longer qualified for active service" (Achenbaum, 1978). To be old came to mean to be cast away; that is, to have almost nothing, and to be dependent on whatever someone might give you (in those days). Conflict theory also explains how older people reacted to the social changes that brought them poverty and deprivation. They consolidated into a powerful lobbying force for social security. Therefore, the social security benefits currently available for the aging population, is the result of direct conflict between competing interest groups. The old banded together to push their

interests and concerns, and that was a starting point for the aging benefits in the West.

The conflict perspective emphasizes that power, privilege and other resources are limited, and that they are distributed unequally among the various groups in the society. As it pursues its own interests and values, each group comes in conflict with the others. Thus, say conflict theorists, whenever you examine a social problem, you should look at the distribution of power and privilege, for social problems center around the conflicting interests and values of a society's groups (Henslin,1983).

Conflict in society, then, is both natural and inevitable. Though it always exists, yet, it played highly a vital role to provide the elderly with retirement security, especially in the West in the early 20th century. Therefore, the poor and neglected elderly could reach their rights with the framework of conflict theory.

#### **Asian Outlook**

In Asia, aging has become an issue of concern for the different sectors of governments dealing with the socio-economic needs of the elderly people. Though older people are expected to be respected, yet many societies are witnessing a new trend. Because of rural–urban migration, industrialization and shifting employment patterns among the younger adult population, older persons are facing increased social isolation and many other challenges in many Asian regions, particularly in rural areas. From a socio-psychological point of view, these isolated people in a community such as a large city, feel alienated (Experts, 2000:161).

However, in some countries such as Thailand, the elderly people are valued for their contribution to society and are encouraged to remain active (UNFPA, 2002). In addition to many other roles played by the seniors, most of the older persons in Thailand play a leading role in religious observances by supervising and providing information concerning religious activities to younger members of the family and community. They also transmit their traditions and culture to the younger generations.

Though the developing Asian countries have been experiencing rapid social, cultural and economic changes, yet the conditions of the elderly have not improved and changed in a satisfactory manner. So far as the elderly women are concerned, they are in a worse situation. They are identified as subordinates to men throughout their lives, and when they are ultimately left alone when they become old, they are deeply poor and destitute. While in the developed countries retirement is expected to be the period to enjoy personal and leisure activities, in the developing Asian countries, the elderly are still preoccupied with their basic livelihood. As social welfare and health insurance in many developing Asian countries have limited resources, the individual financial resources play a significant role to enhance and improve one's quality of life (IFA, 2001). Under such a scenario, the elderly in developing Asia financially remain dependent on others. To illustrate it more thoroughly, they psychologically and physically depend more on others rather than the state, or the relevant agencies.

Very few Asian countries have infrastructure sufficient to help their disabled and the elderly people. One of the countries functioning well in this manner is Singapore wherein the strong

Asia				Europe			8
(Region) Country	Percent 65*			(Region) Country	Percent	2005     2015       16     17       15     19       16     20       11     13       15     16       17     20       16     17       15     18       17     18       16     18       14     14       16     18	
country	1995	2005	2015	country	1995	2005	2015
Asia	5	6	8	Europe	13	16	17
Armenia	7	11	11	Denmark	15	15	19
Azerbaijan	5	7	6	Finland	14	16	20
Iraq	3	3	3	Ireland	11	11	13
Jordan	3	3	3	Norway	16	15	16
Lebanon	5	6	7	Sweden	18	17	20
Saudi Arabia	2	3	3	Britain	16	16	17
Turkey	4	6	8	Austria	15	15	18
India	3	2	6	Belgium	16	17	18
Iran	4	4	8	France	15	16	18
Nepal	3	4	6	Germany	15	18	21
Pakistan	3	4	4	Luxembourg	13	14	14
Sri Lanka	4	6	8	Holland	13	14	18
Indonesia	4	5	5	Switzerland	15	16	18
Singapore	7	8	12	Czech Rep.	10	14	18
Thailand	4	7	11	Hungary	14	16	18
Vietnam	5	7	7	Poland	11	13	16
China	6	8	10	Romania	11	14	15
Japan	14	20	27	Russia	11	13	14
Korea, North	4	8	10	Italy	16	19	22
Korea, South	5	9	14	Portugal	15	17	20
Taiwan	7	9	13	Spain	14	17	18

Source(s): World Population Data Sheet(s) 1995, 2005 and 2015.

financial resources have helped the aging population, and thereby enhanced their quality of life in different ways.

Modernization in many parts of Asia has greatly influenced the lives of the elderly due to increasing change in the family structure and ties, more mobility among the families, more employment by women etc. All these have caused the families to be more segmented, and consequently not to have time enough to invest in the elderly people. Also, with the increasing decline in fertility and mortality rates, population aging is appearing more than ever before: generating significant demands for long-term care (IFA, 2001). Hence, the demographic trends are dramatically changing the face of many nations in Asia, or will soon do so in the future. One way of measuring the speed of these shifts is through a measure of " population aging", although the phenomenon is very recent in Asia, but is rapidly spreading in many parts of the continent.

However, as explored, still the majority of the elderly wish to live with their adult children. There is clear evidence showing the familial and family-feeling among the elderly in most parts of Asia. As observed, modernization is seen as a paradoxical phenomenon in Asia since it is eroding the traditional support system. However, today the elderly people have come into the agenda of many Asian countries as had happened in the West previously. Similarly, Asia too needs to develop enough literature on the topic. It is becoming the region where the majority of the elderly people are concentrated. That is to say, the majority (52%) of the world's senior citizens (people 60 and over) live in Asia; four in every fifteen are concentrated in Eastern Asia including China, and one in six inhabit South-central Asia including India (ES-CAP, 1996). Similarly, about one in fifteen live in South-east Asia including Indonesia, and Western Asia includes the rest.

Such development is largely due to economic success in the region, and a result of success in population control since early 1980s. Increased life expectancy which also resulted in, or is a consequence of, improved health care and living standards, has led to increasing old age in all societies, but more in the Western world. However, while until around the 1970s many countries especially in South-east Asia were still considered to have young populations, since 1980s the older age categories have increased; making it necessary to examine the conditions of these growing elderly people.

Such development is largely due to economic success in the region, and a result of success in population control since early 1980s. Increased life expectancy which also resulted in, or is a consequence of, improved health care and living standards, has led to increasing old age in all societies, but more in the Western world. However, while until around the 1970s many countries especially in South-east Asia were still considered to have young populations, since 1980s the older age categories have increased; making it necessary to examine the conditions of these growing elderly people.

It is noted that since the 1950s, life expectancy of men has increased by 20 years or more in Indonesia, Republic of Korea and Thailand, and by 15 years in Japan, while the number of women has even increased more dramatically (Human Development Report, 1997). These developments have eventually resulted in an accelerated increase in the proportion of the elderly people in almost all parts of Asia, but with some fluctuations.

The elderly people's conditions are not the same all over Asia. For example, in South-east Asia, the proportion of those aged 60 and over is not yet as high as in Japan. There is growing concern in this regard since the necessary institutional arrangements for taking care of them outside the family are not yet in place. Therefore, much has to be done to put it in order and toward adequacy.

#### **European Outlook of Aging**

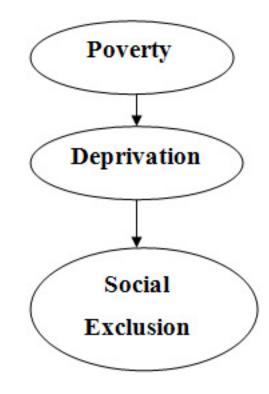
The establishment of individual and universal mandatory pension rights has come to be known as an efficient way to eradicate poverty in old age among both women and men. Health promotion and well-being of these people in Europe are among the issues which have been of priority and well attended in Europe as compared with Asia in the course of the twentieth century. Sociologically speaking, the discipline of sociology came into being to explore and solve, inter alia, the emerging challenges and the social issues of the elderly people, and thereby to enhance their quality of life. As a major task of sociology is to analyze the social problems, gradually social welfare enhanced first in Europe leading to social order which also included the elderly welfare.

"Modernization" which first occurred in Europe, was a multidimensional concept. It was divided into four distinct elements:

- economic modernization (industrialization),
- political modernization (democratization),
- societal modernization (realization of freedom and equality), and
- cultural modernization (the move towards rationalism).

All these four dimensions affected the elderly's lives somehow or other. The process of modernization is still advancing, and is changing the lives of the elderly in almost all the European countries, namely, changing their quality of life.

Progress in general quality of life has contributed to the major "social risks" such as illness, accidents and impecunious old age to be protected in Europe on a larger scale as compared with Asia. At the same time, while poverty is lower among the elderly people in Europe as compared with Asia, yet social exclusion is appearing in the continent as a new concept. Poverty and social exclusion being central issues of social policy, so far as the elderly are concerned, they have been well addressed in Europe. It could be illustrated as follows:



Since new forms of administration occurred in Europe much earlier than Asia due to the emergence of industrialization, elderly issues, and the methods to eliminate them started earlier in that continent, especially in the Western part as compared with Asia, and that is why the quality of life there, started to be enhanced earlier too.

Some of the quality–of–life indicators as found (UNFPA, 2002), could be outlined as follows:

Life expectancy, Availability of health care services, Affordability of health care, Quality of health care, Quality of health control, Quality of housing, Affordability of housing,

Comparative sociological research indicates that there are meaningful differences between the above indicators in Asia and Europe so far as the elderly are concerned. The main causes of difference between the two stems from lack of resources, lack of capital, underdevelopment of administration etc.

#### Conclusion

There is a clear need for research on the type and magnitude of the conditions and problems of older persons in relation to gender, age groups, physical and mental health status, socio-economic status, and ability to continue to be productive. Research is also necessary on the enabling environment, the resources available in the family, community, society, and the state to care for older persons in a way that is conducive to making them independent, self-reliant and productive.

So far as older women are concerned, they particularly face greater risk of physical and psychological abuse due to discriminatory and societal attitudes, and the non-realization of the human rights of women. Women's poverty is directly related to the absence of economic opportunities and autonomy, lack of access to economic resources including credit, land ownership, and inheritance, lack of access to education and support services and minimal participation in the decision-making processes. Poverty can also force women into a situation in which they are vulnerable to sexual exploitation. (Madrid International Plan of Action on Aging, 2000)

It is quite evident that the unprecedented demographic, social and economic changes which had their origins in the nineteenth and the twentieth centuries, and are well continuing into the 21st century, and are transforming the world in different dimensions including the elderly. The declines in fertility reinforced by increasing longevity have produced and will continue to produce unprecedented changes in the structure of all societies, notably the historic reversal in the proportions of the young and the old persons in Europe, and in some cases in Asia. Many parts of Asia are still in their infancy with respect to the development of formal services. Hence, despite rapid social change, family caregiving for the elderly is still the dominant type of caregiving in Asia. Likewise, the profound, pervasive and enduring consequences of population aging presents enormous opportunities as well as enormous challenges for all societies. That is, a scenario which ever needs research, development, planning and investment.

#### References

1- Achenbaum, W.Andrew, 1978, Old age in the New Land, The American Experience Since 1970, Baltimore, Johns Hopkins University Press.

2- Aleksandrova MD., 1974, Problems of Social and Psychological Gerontology, Leningrad, University of Leningrad Press.

3- Conception MB, 1996, The Graying of Asia: Demographic Dimensions in: Added years of Life in Asia, Current Situation and Future Challenges, Bangkok, ESCAP,1996 (Asian Population Studies Series, NO.141)

4- Desai, N. and U. Thakkar, 2003, Women in Indian Society, PP.85, New Delhi, National Book Trust.

5- Experts, A Team, 2000, Advanced Learner's Dictionary of Sociology, New Delhi, Anmol Publications.

6- Finance and Development, June 1995, Washington DC., IMF Publications.

7- Gruyter, W., 1993, European Sociology, New York, ISA Publications.

8- Henslin, James S., and other, 1983, Social Problems, London, McGraw-Hill. Inc.

9- Hughes, B., 1990, Quality of Life in Peace, S., Researching Social Gerontology, PP.46-58, London, Sage.

10- Human Development Report 1997, New York, Oxford University Press.

11- International Federation on Aging (IFA), 2001, Montreal Conference Selected Papers, Montreal.

12- Keller, S. and others, 1994, Sociology, London, McGraw-Hill.

13- MIRE, Comparing Social Welfare Systems in Southern Europe, Vol. 3, Florence Conference 1997.

14- Mullan Phil, 2000, The Imaginary Time Bomb: Why Aging Problem is not a Social Problem? New York, I. B. Tauris Publishers. 15- Neubeck, K.J., 1996, Sociology, pp-478, New York, Mc-Graw-Hill Inc.

16- O'Rand, Angela and others, 1990, Concepts of the Life Cycle, Annual Review of Sociology, 16: 241-262.

17- Population Newsletter, No. 27, Dec 2001, UN Population Division, Department of Economic and Social Affairs, New York.

18- Population and Development Review, Vol. 28, No. 2, June 2002, Population Council, New York.

19- Population and Development Review, Vol. 27, No. 1, March 2001, Population Council, New York.

20- Tinker, H., 1983, Improving the Quality of Life and Promoting Independence of Elderly People, London, HMSO.

21- UNFPA, Population Aging and Development, 2002, New York.

22- Valencia Forum, 2002 International Association of Gerontology, Co-sponsored by UNFPA, Madrid International Plan of Action on Aging 2002.

23- World Population Data Sheet(s) 1995, 2005 and 2015, Population Reference Bureau, Washington DC.

### The Elderly Care Special Interest Group : Opinions and Future Plans

#### Hakan Yaman

Correspondence: Prof Dr Hakan Yaman Uncali Mh. 1262. Sk. No: 15 Öksüzoğlu Konakları A Blok Kat 2 Daire 5 07000 Konyaaltı Antalya Tel: 0090 536 320 99 33 Email: hakanyama@gmail.com

#### ABSTRACT

**Aim:** Studies on the needs of the steadily increasing aging population globally and in our country are in their beginnings in family practice. In this study the views of family physicians with special interest in elderly care, on the actual status of elderly care and the working and research areas, have been evaluated.

**Methods:** In October 2015, in the 20th WONCA Europe Conference in Istanbul, a study group about elderly care "Elderly Care Special Interest Group" was initiated. In November 2015, a questionnaire consisting of 14 questions with 6 open ended items was e-mailed as a link and answers of the group members were evaluated. Descriptive statistics were used.

**Results:** Group members consisted of 16 Family Medicine consultants who worked in different health institutions. They are expected to work in the primary care of the patients mostly (81.3%). In the newly initiated group, developing the concept of follow-up of elderly patients in family medicine (93.8%) and preventive measures for elderly needs (87.5%) were suggested mostly for study areas. Follow-up of elderly in primary care settings (81.3%), care of the frail elderly (75%) and management of chronic diseases (68.8%) were brought up mostly for research focus. Being able to conduct multi-centered studies was mentioned as the strong points of the group while absence of a pathway concerning studies was

mentioned as a weak point. Developing an approach to elderly care was seen as an opportunity, but funding resources for the projects and delays in coordination of the group were mentioned as possible threats.

**Conclusion:** Similar elderly care special interest groups will certainly emphasize the necessary issues relevant to elderly care. The group members are competent and enthusiastic to study on elderly care issues and this will empower the group. Although living in different regions of the country may seem like a handicap to meet, social media utilization will help to keep up the communication.

**Key words:** Questionnaire, Elderly Care, Family Medicine.

Please cite this article as: Hakan Yaman, The Elderly Care Special Interest Group : Opinions and Future Plans. Middle East Journal of Age and Aging . 2018; 15(1):16-19. DOI: 10.5742/MEJAA.2018.93291

#### Introduction

The addition of a new agenda is expected to be added to the working agenda of family physicians in Turkey. Since as the world is aging, our country is aging rapidly, too. (1)

Family health centers are the first point of contact for many patients in our country. Especially in rural areas, patients do not want to go to other health institutions. On the other hand, patients in urban centers are frequently referred to hospitals. Structural changes such as elderly "low threshold" practices in hospitals are useful initiatives to remove some obstacles to elderly people's health care services, but it is clear that efforts to address unmet health needs have yet to be made.(2)

In our country, studies on the needs of elderly individuals in the practice of family medicine are still in their infancy. In this context, "elderly health special interest group" aims to contribute to this issue.

In this study, it is aimed to examine the opinions of family physicians, who are concerned with elderly health in the areas of study and research related to the elderly health field.

#### Method

The study covers the opinions of the members of the Elderly Health Special Interest Group of Family Physicians, who met during the 20th WONCA European Congress event held in Istanbul on 22-25.10.2015. In November 2015, they conducted a questionnaire consisting of 14 questions with 8 closed- and 6 open-ended questions. The questionnaire was filled out via the link sent via e-mail. The findings of the questionnaire were analyzed with descriptive statistics and the results were shared with the group members. It is believed that the results obtained will guide the group's work.

#### Results

Sixteen Family Medicine specialists participated in this study. Nine (56.3%) worked in the university, four (25%) in an Education and Research Hospital, two (12.5%) in a Family Health Center, and one (6.3%) in a Community Health Center.

Answers to the question on their role on elderly health issues revealed subject headings like primary prevention (n = 13; 81.3%), secondary protection (n = 9; 56.3%), tertiary protection (n = 5; 31.3%), rehabilitation (n = 5; 31.3%), and other tasks such as treatment and research (n = 2, 12.5%).

Questions on their abilities of institutional training and research opportunities revealed these results; (n = 5; 31.3%), elderly health research (n = 9; 56.3%), elderly health education (n = 4, 25%), inter-professional training and education (n = 5; 31.3%), and epidemiological studies (n = 5, 31.3%). Twelve (75%) participants had studies in the elderly health research field. They had published several articles.

The participants stated, that the SIG should focus on geriatric assessment (n = 11; 68.8%), evaluation of multi-centre data (n = 12; 75.0%), development of an elderly health monitoring concept

in family medicine (n =15; %93.8), development of an elderly out-patient concept (N = 9; 56.3%), development of a protective approach to aging (n = 14, 87.5%), management of frailty (n = 8; 50%), prevention of geriatric giants (n = 1; 6.3%), poly-pharmacy (n = 12; 75%), drug prescribing (n = 9; 56.3%), management of chronic disease (n = 13; 81.3%), nutrition of elderly patients (n = 10; 62.5%), palliative care and hospice (n = 4, 25%), caregiver problems (n = 8, 50%), comorbidity (n = 6; 37.5%), aging-friendly primary care (n = 11; 68.8%), acute geriatric care (n = 2, 12.5%), non-acute geriatric care (rehabilitation) (n = 6; 37.5%), the development of quality of life improving programs (home health care, home care, day care homes) (n = 9; 56.3%), health services organizations (n = 7, 43.8%), complexity (n = 2; 12.5%), counseling services (n = 13; 81.3%), ethical and cultural problems (n = 5; 31.3%), and social problems (n = 5; 31.3%).

The research priorities, that should be included in the elderly health field were mentioned as elderly health problems in family health centers (n = 10; 62.5%), elderly care monitoring in family health centers (n = 13; 81.3%), family health centers and hospital relations (n = 8, 50%), management of frailty (n = 12; 75%), %), the establishment of elderly health outpatient clinics in hospitals (n = 5; 31.3%), the first point of care issues (n=6; %37.5), inter-professional collaboration (n=6; %37.5), electronic records (n = 7, 43.8%), longitudinal care (n = 2; 12.5%), patient compliance (n = 2, 12.5%), communication skills (n = 3, 18.8%), chronic disease management (n = 11;68.8%), care of acute problems (n = 2; 12.5%), diagnostic approaches (n = 8; 50%), treatment approaches (n = 6; 37.8%), decision making (n = 3, 18.8%), multi-morbidity (n = 5;31.3%), health promotion (n = 9; 56.3%), palliation (n = 3; 18.8%), prevention (n = 6, 37.5%), integration (n = 1, 6.3%), biopsychosocial approach (n = 6, 37.5%), and cultural sensitivity (n = 1, 6.3%).

The participants reported the following opinions on the effect of capacity building and network formation on elderly health care and professional environment: reaching out to patients and their families at home health care, collaborating with universities and primary care, ensuring networking of family physicians and other branch specialists, participating in educational activities, and communicating via social media.

The strengths of the elderly health special interest group was as follows: the opportunity for participants to be able to work in different regions of Turkey and in strong multi-center studies, their willingness and enthusiasm, their participation from different health care institutions at different health care levels, the opportunity to develop different perspectives and different solutions, their competency, the support of academicians.

Weaknesses have been reported as follows: the roadmap for the studies, that can be done has not been established yet; the distances of cities, where they leave; obstacles to meet; existence of different groups, and problems of sustainability.

Opportunities were defined as the possibility of taking part in more extensive studies; the possibility of multi-centered studies that can determine geriatric patients' problems and their distribution; the competence of the team; the lack of work in this area, and the opportunity to develop an elderly health care approach, that can be developed in our country. Threats have been argued as communication problems, institutional barriers, interdisciplinary competition, difficulties in finding resources for projects, and the risk of disintegration due to poor coordination.

#### Discussion

It is striking that participants have a balanced distribution of institutions. As Family Physicians, they report predominantly primary prevention and primordial protection and secondary protection. At the same time, this refers to the limits of the working area in family medicine. Accordingly, in the elderly it is necessary to develop health (sports, proper nutrition), vaccination, chemoprophylaxis and secondary protection in chronic diseases.(3,4)

It is also a fact that family doctors spend a lot of time in home health care due to the need in Turkey. Especially those working in education and research hospitals undertake this task. In this framework, it is possible to add health and palliative care services at home to the above preventive health services. The problems that arise in this area also need to be investigated and managed.

Family doctors who work in the university are contributing to the elderly health and care education, because of their educational duties as well as limited service to the elderly in a clinical sense.

The study group has proposed mainly the development of health monitoring concept, a preventative approach, a counseling service, a program for the management of chronic diseases, polypharmacy, standards, nutrition program, elderly evaluation, and aging- friendly practices. It is possible to collect these works under one heading. The "Age-friendly PHC Instrument Set", which is an initiative initiated by the World Health Organization(5). Expanding this concept, would help to meet the anticipation of inclusion of the key areas proposed above. However, the development of the instrument alone will not suffice. Older "follow-up" (monitoring) or periodic health check-ups or the institutionalization of assessment needs should be continued. It would be unrealistic to expect these services to be provided by a single physician and family health worker. Some support schemes, such as aging-friendly coordination centers, should support this process.(6,7) Major conditions such as cognitive impairment, depression, urinary incontinence, instability, and immobility; which are called geriatric giants that impair life quality, are quite common among the elderly.(8) Aging-friendly coordination centers counseling may also be possible.

Information should be produced in order to better understand the duties related to elderly care, which are attributed to family physicians and the emerging health problems. Special interest groups have reported, that in the direction of their experience, the issues such as elderly follow-up, frailty management, management of chronic diseases, elderly health problems and health promotion should be examined. As understood from these statements, health monitoring of the elderly has high priority. There are some proposals on the periodic health examinations by the Public Health Institution of Turkey, which needs to be elaborated on and transformed into a monitoring program. Based on the best evidence available in this framework, it is important to form a guide and assess the quality of this guide, and then take the views of the different stakeholders. The linguistic adaptation of the screening instruments to be recommended in the handbook also constitute an important field of study. In addition, the development of new diagnostic and management instruments specific to our country and culture should be targeted. Frailty is a new concept, that attracts the attention of the health care environment. The management of the frail individuals and more importantly its prevention has priority. Undoubtedly, family physicians will be the contributors to this issue. (9) The development of diagnostic tools for this and the planning of early interventions should be included in research topics. Another growing group of problems is dementia. This issue should be addressed, although it has not been addressed in this study.(10,11)

The Elderly Care Special Interest Group expresses the strengths of its members to be made up of diligent, interested, motivated, experienced, competent members, and with easy accessibility to faculty members. They say; that the lack of a roadmap, the lack of standards, and the fact that the members reside in different places are weaknesses. As an opportunity, it is stated that the group is very multi-centered and that the studies in this area are few in number. As a threat, it is stated that individuals participate at different levels of care, that they could face communication problems, support for projects is difficult, and the project may have the risk of poor coordination .

#### Conclusion

Special interest groups, which are needed in our family medicine society, will undoubtedly contribute to important studies in this area. Participating researchers of this group are enthusiastic and competent, which will take the group further. The fact that the group members live in different cities seems like a handicap, but the presence of social media and the openness of communication channels will be helpful in overcoming this problem.

Acknowledgement: I would like to thank Didem Kafadar and Ramazan Vural for their support.

#### References

1. Yaman H. Yaşlıya Yönelik Politikalar ve Aile Hekimliği. PRN Aile Hekimliği Dergisi 2014;9(97):32-34.

2. Yaman H, Yılmaz B. Toplumda Yaşayan Yaşlı Bireylerin Sağlık Gereksinimleri. (Özet) 8. Güz Okulu, 24-28.09.2014, Antalya, s. 131.

3. Yaman H. Uzmanına Danış Oturumu: Aile Hekimliğinde Koruyucu Yaşlı Sağlığı. 7. Aile Hekimliği Güz Okulu, 25-29 Eylül 2013, Antalya, s.122.

4. Aile Hekimliği Uygulamasında Periyodik Muayene Rehberi. Ankara: Türkiye Halk Sağlığı Kurumu. 2015.s5.

5. Yaman H, Akdeniz M, Kanevetçi Z. Ülkemizde Beklenilen Demografik Değişime Hazırlık: Yaşlı Dostu Birincil Bakım Merkezleri. RNA Aile Hekimliği 2008; 2 (4) :14-21.

6. Yaman H. Yaşlı Dostu Sağlık Ve Bakım Uygulamaları: Yaşlı Dostu Döşemealtı Örneği. Yaşlı Dostu Kentler Sempozyumu. 26-27 Kasım 2015, Bursa, s. 91-92. 7. Yaman H. Geriatrik Hasta Yönetimi: Kognitif Problemler-Demans Demansın Toplum İçindeki Yönetimi: Aile Hekimliğinin Yeri 13. Ulusal Kongresi, 23-27 Nisan 2014, Antalya, s.32-33.

8. Willeboordse F, Hugtenburg JG, vanDijk L, Bosmans JE, de Vries OJ, Schellevis FG, Elders PJ. Opti-Med: the effectiveness of optimised clinical medication reviews in older people with 'geriatric giants' in general practice; study protocol of a cluster randomised controlled trial .BMC Geriatr. 2014; 14: 116.

9. Yaman H, Yaman A. Aile Hekimliğinde Düşkünlük: Tanısı ve Yönetimi. Ankara Med J, 2015, 15(2):89-95.

10. Yaman A, Yaman H. Aile Hekimliği'ne Başvuran Yaşlı Bireylerde Bilişsel Değerlendirilme. Konuralp Tıp Dergisi 2015;7(2):121-124.

11. Muntinga ME, Van Leeuwen KM, Schellevis FG, Nijpels G, Jansen AP. From concept to content: assessing the implementation fidelity of a chronic care model for frail, older people who live at home. BMC Health Serv Res. 2015; 15: 18.

### Demographic Changes in the GCC Countries: Reflection and Future Projection

#### Abdulrazak Abyad

A. Abyad, MD, MPH, MBA, DBA, AGSF, AFCHSE CEO, Abyad Medical Center, Lebanon. Chairman, Middle-East Academy for Medicine of Aging President, Middle East Association on Age & Alzheimer's Coordinator, Middle-East Primary Care Research Network Coordinator, Middle-East Network on Aging

Correspondence: Dr Abdulrazak Abyad Email: aabyad@cyberia.net.lb

The overwhelming demographic and social changes that have changed the six-nation Gulf Cooperation Council (GCC) region (Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates) will continue in the coming decade. The GCC population, total 45 million people in 2011, is less than 1% of the global population. It has one of the fastest-growing populations in the world however. By 2020 this population is forecast to increase by one-third, to 53 million people. The vast majority 54% will be under 25 years of age. This is estimated to change to about 36% by 2050. The swift growth and the relative youth of the population present serious challenges as well as major opportunities (1).

The GCC is one of the wealthier regions, in terms of GDP/ capita (at just under \$32,000), well above the MENA Ex. GCC, and in line with North America and Europe. It is a distinctive region due to its unique hydrocarbon reserves compared to a relatively small, national population. Growth in the six economies, in terms of spending and GDP/Capita as well as welfare, heavily relies on oil revenue to attract private investors and to provide extensive public services and subsidies to nationals. With not enough diversification in the economy, the GCC countries' government spending will continue to cause a drain on fiscal accounts.

Based on unchanged policies and historic trend, the International Monetary Fund (IMF) forecast a 2% annual growth in real GDP for the rest of the decade.

In addition, IMF also predicted an annual increase in population of 3.5%. The imbalance in growth rates requires GCC governments to look closer at their policies to better match macroeconomics priorities and objectives (5).

GCC citizens feel unaccountable for their welfare; the current education systems do not provide them with world-class, competitive skills, government employment and unemployment benefits remove the incentive for specialization and dynamic job seeking and the lack of skilled national manpower, and consequent dependence on expatriate labor will remain. Reforms are needed to aid countries to diversify their economies to head away from an unrestrained fiscal drain.

#### **GCC Demographic Structure**

#### Size and Growth

The GCC has a low population, when compared with other regions, totaling nearly 45 million people in 2011. The most populated country is Saudi Arabia with 28 million (65% of the total), followed by nearly 8 million in the UAE. The International Monetary Fund estimates a compounded growth rate (CAGR) of 2.41% in the next 5 years, increasing the population further to 49 million in 2016.

The growth rate is substantially lower than the CAGR throughout 2004-2008 of 5.9% (1).

By 2025, the GCC is predicted to have a total population of 57 million, to grow by about 14 million more by 2050. As of 2011, the lowest median age in the GCC is 24 years in Oman and the highest is 31 years in Qatar. The average age in the entire GCC region is 27 yrs with over 20% below the age of 15.

#### The Pyramids

The young population will predominate in the GCC over the coming decade, which is different from the ageing populations of the US and western Europe. The proportion of the population under 15 years is substantial. The fertility rate in the GCC has been declining as there is more prominent consciousness of family planning. Except for Oman, all other GCC countries' fertility rates have diminished by more than 50% (2). This could likewise be associated to the increased average cost for basic items and increased education prospects for women. As the age of marriage increases, this diminishing pattern in birth rates is anticipated to persist. In addition, GCC pyramids have a skewed lump in the male section, particularly working age, which is because of the high number of male expatriates in the countries (3).

While the more youthful age group (15-24) comprises the main part of the Arab population, development rates among nations vary enormously and are falling over time, showing that this section will encounter declining swelling rates going forward. Between 1995-2010 Yemen had the most noteworthy rate among Arab nations, with the young population multiplying in a fast way, however this is predicted to swell by under 40% throughout the following 15 years.

Saudi Arabia saw its young population swell by 66% in the course of the most recent 15 years, yet this rate is predicted to tumble to only 15% through 2025. It is fascinating to take note of that the adolescent population 15-24 will decrease in Iran, Algeria, Morocco, Tunisia, Lebanon, and Turkey throughout the following 15 years, showing pointedly declining birth rates and additionally expanded newborn infant death rates.

The enormous size of the youthful population, which has expanded access to education, the global media and new advancements, proposes that social states of mind and standards may change quickly.

The current pattern of more women entering the work force is probably going to proceed, buttressed by expanded interest in educating women for employment, an adjustment in social demeanors and the production of good examples for another age of working women. Organizations will confront strains to adjust to this pattern, yet won't really utilize similar models found in the West.

The population will stay very young over the forecast period, in divergence to the ageing populations of the US and western Europe. The percentage of the population under 5 years of age will drop from 29% in 2008 to 24% in 2020, but will remain sizeable. The large size of the young population, which has increasing access to education, the international media and new technologies, indicates that social attitudes and norms may change fast.

#### **Population trends**

Demographic trends normally change gradually and population totals usually are considered as being among the easier economic indicators to forecast. However, population growth in the GCC is profoundly driven by immigration trends, with expatriates making up 42% of the region's population in 2009. This leads to population totals being less foreseeable. There are three possible scenarios.

The GCC's population would flourish from an estimated 39.6 million in 2008 to 53.4 million in 2020– a 33% increase over 12 years. This level of population growth will need marked investment in infrastructure and services, including power, water, transport, housing, healthcare and education. This will place pressure on government budgets. Much of the GCC's current spending goes on wages, subsidies, healthcare and education. The need for these services will increase parallel to population growth.

Urbanization of the population is already there, and this will endure to remain the situation, with added pressure on urban infrastructure and housing. Where space permits, some governments will endeavor to develop new policies to decrease the stress on current cities, such as the "economic cities" in Saudi Arabia.

By 2020 only the Africa region will have a younger population profile than the Middle East . The US and Europe will progressively seek to attract younger migrants from overseas to help decrease their old/young dependency ratio, and, in particular, to help fund pensions. These countries are also expected to make rising efforts to entice foreign students to their universities as their own populations age.

The relative youth of the population will constrain the healthcare burden on public spending, but young GCC nationals will also hurt from what are sometimes termed diseases of prosperity, such as diabetes or smoking-related diseases. There is a challenge to provide adequate healthcare needs of the region over the next 10-20 years. Most governments in the region have already made important preparations to meet the challenge. Currently some 75% of healthcare spending in the GCC is funded by the public sector. Obesity and cardiovascular diseases, are expected to account for a significantly larger proportion of total healthcare costs in the future.

It is predicted that spending on healthcare as a proportion of GDP will rise from current levels of less than 5%, but will not reach the level spent in Europe (typically around 8%) or the US (5%) by 2020.

The large size of the young population, and its rising access to education, the international media and new technologies, indicates that social attitudes and norms will change fast. The new generation of young people in the GCC will be highly educated, and will thus have high expectations of high-status future employment.

They will be progressively technologically literate. Many will be prosperous and well-travelled, and educated overseas, giving them a high awareness of different lifestyles, and cultures. Even those who are not educated abroad will be more likely to speak foreign languages and to use the Internet to communicate with young people from other countries and cultures.

#### The Expatriate

Most of the of the GCC population comprises expatriates. In light of 2010 Information, Credit Suisse stated Qatar as having 86.5% expatriates, the highest percentage of international migrants in the world, despite the fact that these tend to have a transient quality and relocate in and out on a regular basis.

This is trailed by 70% and 68.8% in Kuwait and the UAE, respectively.

The GCC region as a whole has an average of 53.43% of expatriates matched to an average of 9.5% in the MENA region. Qatar has the biggest immigration rate in the world with 40.62 of 1,000 people entering the country being expatriates. None of the GCC countries have a negative net immigration rate which demonstrates that there is always a higher rate of expatriates entering than leaving.

Table 1:	Expatriate	Population	2010
----------	------------	------------	------

Qatar	86.5%
UAE	70%
Kuwait	68.8%
Bahrain	39.1%
Oman	28.4%
Saudi Arabia	27.8%

The high inflow of expatriates is reflected in the GCC labor force. The positions filled by expatriates extend from low-paying, low-skilled construction jobs to exceedingly professional and dedicated jobs. Closely, 4.5 million nationals are potentially entering the job market compared to 5 million nationals who were employed in 2010. IMF predicts that an extra 2 to 3 million nationals will not be capable of finding jobs (4).

#### Welfare

GCC countries are famous for their liberal and broad welfare framework. The government appropriated its oil incomes for vital motivations to guarantee accessible fundamental services. Most government services are either at no cost or at exceptionally subsidized prices such as electricity, water, gas, healthcare and commodities such as food. Aside from Oman where local companies are taxed, taxes in the other GCC countries mainly consist of foreign corporation income taxes.

This welfare system is stressed and frustrated by the Elderly Support Ratio, which calculates the degree to which the youth population is able to support the aging and retired. Currently, on a global scale, there are 9 working age persons supporting one non-working age person while in the GCC the ratio is significantly higher, with the UAE and Qatar having the highest at nearly 80 people in support of one senior citizen.

At present, on a worldwide scale, there are 9 working age people supporting one non-working age individual while in the GCC the proportion is altogether higher, with the UAE and Qatar having the most noteworthy at almost 80 individuals in help of one senior resident. Be that as it may, a stark inversion is normal in only 40 years, when this proportion is anticipated that would drop to the low single digits over the GCC. This basically implies that by 2050, Kuwait, for instance, will have only 3 working age people supporting one senior citizen; this will constitute a noteworthy strain on resources for the country.

#### References

1. GCC Population Forecast to Reach 50 Million in 2013, Business Intelligence Middle East, 18 February 2012

2. Arab Human Development Report, United Nations Development Program, 2010

 Smaller Old age population and the number of people in each age group increases as we move down the population pyramid
 Meeting the Unemployment Challenge, Masood Ahmed, 19 January 2012

5. Bahrain's Budget Deficit up 5-fold in 10 Years, SyndiGate. info, 4 April 2012

6. A Welfare System, Kingdom of Saudi Arabia Ministry of Foreign Affair

#### Citation:

Please cite this article as: Abdulrazak Abyad, Demographic Changes in the GCC Countries: Reflection and Future Projection. 2018; 15(1):20-24. DOI: 10.5742/MEJAA.2018.93292

### GCC Population: core scenario by country

	2000	2005	2010	2015	2020
Total(m)	29.63	35.08	41.45	47.52	53.41
Average annual change over previous five years	2.80	3.44	3.40	2.80	2.40
Saudi Arabia	20.47	23.12	26.18	29.59	33.34
Kuwait	2.23	2.99	3.58	4.40	5.20
UAE	2.4	4.61	5.57	6.44	7.06
Bahrain	0.64	0.89	1.18	1.45	1.66
Oman	2.40	2.51	3.11	3.32	3.53
Qatar	0.64	0.97	1.82	2.33	2.79

Sources: IMF; individual country statistical agencies (historical data); Economist Intelligence Unit long-term forecasts. (Our population growth estimates are based on separate projections for each GCC state and population growth is projected to be higher in some of the smaller countries.)

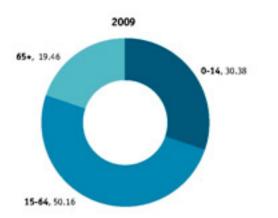
#### GCC - 2050 Male GCC - 2010 Female Male Female 100+ 100+ 95-99 95-99 90-94 90-94 85-89 Median Age ~ 36 Median Age ~ 25 85-89 80-84 80-84 75-75 75-79 70-74 70-74 65-69 65-69 60-64 60-64 55-59 55-59 50-54 50-54 45-49 45-49 40-44 40-44 35-39 35-39 30-34 30-34 25-29 25-29 20-24 20-24 15-19 15-19 10-14 10-14 5-9 5-9 0-4 0-4 2.4 1.8 1.2 0.6 0 0.6 1.2 1.8 2.4 3 3 0 3 3 2.4 1.8 1.2 0.6 0 0 0.6 1.2 1.8 2.4 Population (in millions) Age Group Population (in millions) Population (in millions) Age Group Population (in millions)

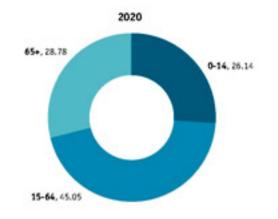
### Figure : GCC Population Pyramid – 2010/2050

Source: US Census

#### Age breakdown

(% of population)





Source: Economist Intelligence Unit.

	Elderly Support Ratio*		Life Expectancy at Birth (yrs)						
	2010	2050	All	Male	Female	% Urban	Pop. Per km²	GDP/capita (US\$) – 2009	Mobile Subscribers per 100 inhabitants
World	9	4	69	67	71	50	51	10,030	60
United Arab Emirates	79	9	77	77	79	83	14	38,960	143
Qatar	78	5	76	75	77	100	152	61,532	131
Bahrain	32	4	75	73	77	100	1,807	17,609	186
Kuwait	32	3	78	76	80	98	175	41,365	100
Saudi Arabia	22	5	76	74	78	81	64	13,901	209
Oman	21	4	72	70	74	72	10	17,280	116

\* Elderly Support Ratio = Working age population (age 15-64)/ Population 65+ Source: 2010 World Population Data Sheet, Population Reference Bureau, GDP/Capita sourced from World Bank Data