Global Health on Aging & Non-Communicable Diseases

Dr. Nabil Kronfol
President , Lebanese Healthcare Management Association

Introduction

The health policy landscape has changed dramatically over the last decade. Governments have recognized that health is a global issue. Global health has developed a profound and growing influence on national public health policies and is also becoming a foreign policy priority[1]. Notice the sharp increase in global health aid as part of the international community's efforts to reduce poverty and achieve the Millennium Development Goals.

A proposed definition for global health is collaborative trans-national research and action for promoting health for all, especially global issues which have a multiplicity of determinants and that transcend national boundaries. This definition is based on Koplan et al[2] and emphasises the critical need for collaboration. It is also action orientated.

Important challenges for the 21st century include the need to build basic capacities and to shape the social and political factors that have become the ultimate determinants of health. Kickboush advocates the need to understand global health to include the provision of public goods for health. This suggests the development of strong institutions for global health governance such as the (reformed) World Health Organisation. A multi-sectoral approach is needed with the public sector, NGOs, civil society and the private sector.

At medical schools in the western hemisphere, there has been a huge increase in interest around global health. Universities are global institutions. Their students are drawn from an increasingly porous international community. Global health is becoming a critical part of the educational, research and moral mission of the university[3].

On Ageing

Over the past few decades, many countries in the Region have experienced changes in lifestyles including unhealthy nutrition, reduced physical activity and tobacco consumption. The once dominant infectious diseases are now being replaced by NCDs and their associated common modifiable risk factors such as hypertension, diabetes mellitus, dyslipidaemia, smoking and obesity.

[1] "Creating a global health policy worthy of the name"; A Friends of Europe Development Policy Forum (DPF) discussion paper in partnership with Europe's World on the occasion of the European Development Days 2010
[2] Koplan JP, Bond TC, Merson MH, Reddy KS, Rodriguez MH, Sewankambo NK, et al. Towards a common definition of global health. Lancet 2009; 373: 1993- 5.
[3] Richard Horton; "Global science and social movements: towards a rational politics of global health"; The Lancet,2009

Underlying Determinants	Common Risk Factors	Intermediate Risk Factors	Diseases
Globalization Urbanization Ageing	Unhealthy diet Physical Inactivity Tobacco and Alcohol Aging Heredity	Raised blood sugar Hypertension Abnormal lipids Obesity Lung function	Heart disease Stroke Cancer Diabetes Respiratory Disease COPD

Adapted from WHO and PHAC 2005[4]

Trends in the demography of aging, increased life expectancy and the changing age structure of the population in several countries of the region are additional important drivers of increases in the total burden of NCDs. It is estimated that, overall, 47% of the region's burden of disease is due to NCDs, and by 2020 this is anticipated to rise to 60% [Khatib, 2004][5], yielding one of the world's greatest increases in the absolute burden of NCDs and their risk factors [Motlagh et al., 2009][6].

In particular, cardiovascular diseases (CVDs) and stroke are rapidly growing problems and represent the main underlying causes of morbidity and mortality, notably among older adults. (Refer to end note 1)

The cumulative effect of chronic disease throughout the life course and the age-related decline in physiological reserves in old age contribute to the onset of frailty, disability and dependency in the aging population, all of which has become leading drivers of healthcare resource utilization.

The common theme that unites all NCD diseases is that these conditions require a complex and comprehensive response over an extended time period with coordinated input from a wide range of health professionals and access to essential medicines and monitoring systems.

The Challenges of Ageing and NCD in the Region

Epidemiologic research already reveals high levels of NCDs and disabilities among the current population of the region notably the older age groups. Based on a survey in nine Arab countries by the League of Arab States (PAPFAM, 2008), the percentage of older adults suffering from at least one chronic disease ranged between 13.1 per cent in Djibouti and 63.8 per cent in Lebanon, with the majority of the countries having rates above 45 per cent (Table). Hypertension, heart diseases, diabetes, arthritis, chronic back pain, glaucoma and cholesterol are, in the majority of the countries, the leading causes of morbidity.

Worldwide, three of the five countries with the highest prevalence rates of diabetes are from the region (UAE, Qatar and Bahrain). Diabetic individuals often suffer from severe disabling conditions, such as vision impairment, leg amputation and renal and liver failure. Rates of cancer vary in the region; nevertheless, elevated rates of lung and bladder cancer are noted among men in Tunisia, Algeria, Jordan, Egypt and Lebanon, and of breast cancer among women in Lebanon (Lakkis et al., 2010)[7]. Furthermore, high prevalence rates of functional disability in performing Activities of Daily Living (ADL) are noted in Djibouti,

[4] WHO and PHAC (2005). *Preventing Chronic Disease: A vital Investment.* Geneva, World Health Organization. http://www.who.int/chp/chronic_disease_report/contents/foreword.pdf
[5] Khatib O (2004). Noncommunicable diseases: risk factors and regional strategies for prevention and care. *Eastern Mediterranean Health Journal*, 10: 778-788
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Tunisia, Lebanon, and Yemen (PAPFAM 2008)[8].

Country	Suffering From at least One disease (2)	Disability Amongst Older adults (3)	Breast Cancer (1)
Lebanon	63.8	15.3	71
Algeria	55.2	7.5	23.5
Libya	55.1	10.1	22.9
Tunisia	54.1	15.5	
Morocco (4)	45.8	5.1	35
Syria	43.2	9.9	30.4
Yemen	40.0	15.2	
Palestine (6)	33.3	7.5	42.6
Djibouti	13.1	17.2	
Egypt (5)			49.6
Bahrain			46.8
Jordan			41.4
Kuwait			36
Iran			23.2
Oman			21.9
Saudia			15.4

(1) Age-standardized Incidence rate (per 100,000) (Lakkis et al., 2010)
(2) Older adults suffering from at least one chronic disease (PAPFAM 2008)
(3) Disability (PAPFAM 2008)
(4) Morocco (Casablanca) - For Breast Cancer
(5) Egypt (Gharbia) - For Breast Cancer
(6) Israeli Arabs - For Breast Cancer
(7) Libya Benghazi - For Breast Cancer

Substantial differences in the health profiles of women and men exist, with rates of cardiovascular diseases higher in men, and rates of diabetes, obesity, musculoskeletal disorders, osteoporosis hip fractures and depression higher in women (Yount and Sibai, 2009)[9]. Overall, older women report higher mean number of chronic conditions and higher prevalence rates of disability across all items of ADL than men.

Of significance are the alarming levels of obesity (around 40 per cent), most notably among older women in the oil-rich countries such as Kuwait, Bahrain, and the UAE and in Tunisia (Sibai et al)[10]. Since 1980, obesity rates have tripled or more in some parts of the Middle East (Shara, 2010)[11], and WHO reports have identified obesity as the most pressing health concern in the region.

Behavioural risk factors also play an important role in the health and epidemiological transition. Wide variations have been reported in the prevalence rates of cigarette smoking across Arab countries (End note 2) Furthermore, waterpipes (shisha or narghile) are increasingly becoming widespread in the Arab world suggesting a prevalence rate of around 11 per cent among older adults (Chaaya et al., 2006)[12].

Health Care Delivery for Older Arabs

Resources, coverage and benefits provided to older persons vary considerably amongst and within Arab countries. While free health services are provided in the oil-rich GCC countries, Syria and Jordan, out-of-pocket health expenditures represent often the most important source of financing care. The poorer the country, the larger the share of out-of-pocket expenses (Yount & Sibai, 2009). Civil society organizations, charity and religious associations have assumed, in several countries of the region, a prominent role in caring for the older people, filling a vacuum created by the weak states.

Health care delivery in the region is largely built around treatment rather than prevention and around acute, episodic models of care that is ill-equipped to meet the requirements of those with chronic health problems. Chronic conditions frequently go undiagnosed or are poorly controlled until more serious complications arise. Co-morbidity among older persons is attended by a number of different health care specialists within a fragmented vertical disease-centred health care system. Governments have not yet resonated with the need for prevention of chronic diseases.

Interventions for NCD prevention and control are complex and multifocal. The approach to chronic care management is better addressed through better screening and other primary preventative measures and treatment to enhance functional status and enhance quality of life (Grumbach, 2003)[13]. Additionally, greater emphasis needs to be placed on home-based care services.

The Opportunities

NCD and an aging population challenge the health care system in most countries and raise the importance of health reforms. Public health interventions exist to to promote healthy aging and help translate research into sustainable public policies and community-based programs (CDC, 2010[14]; Daar et al., 2007[15]; Sibai et al, 2012). Measures include:

1. Raise public awareness and the political priority of non-communicable diseases
2. Promote healthy lifestyle behaviors
3. Endorse the use of preventive services
4. Re-orientate health systems to accommodate the increase in the number of persons with chronic diseases and disabilities
5. Espouse family-centred care

A serious and sustained effort, in the context of strengthening of health systems, is needed by the WHO, the World Bank and development agencies, foundations, national governments, the civil society, non-governmental organizations and the private sector including the pharmaceutical industry and academics (Beaglehole et al., 2005)[16]. Governments need to ratify and implement the provisions of the "Framework Convention on Tobacco Control" and implement the "Global Strategy on Diet, Physical, Activity, and Health"

Global Health Issues: "The Notion of Social Constructionism"

Shiffmana attempts to explain why some global health issues such as HIV/AIDS attract significant attention from international and national leaders, while other issues that also represent a high mortality and morbidity burden remain neglected. He concludes that "the rise, persistence and decline of a global health issue may best be explained by the way in which its policy community – the network of individuals and organizations concerned with the problem – comes to understand and portray the issue and establishes institutions that can sustain this portrayal"[17].

Global health analysts present evidence that material factors such as mortality and morbidity burden and the availability of cost-effective interventions may not explain the variance in the levels of attention health issues receive[18],[19],[20],[21]. Shiffmana proposes the need to explore a social explanation for the relative importance of issues in global health and draws on the paradigm of "social constructionism".

Immanuel Kant and Thomas Kuhn argue that what human beings call "reality" is not something objectively "out there" waiting to be discovered but is constructed through social interactions[22] and hence scientific enquiry itself is shaped by socially constructed categories[23]. Bernd Appelt

[8] Pan Arab Project for Family Health (PAPFAM) (2008). League of Arab States: Analysis of Survey Data. http://www.papfam.org/papfam/summery.htm
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of the German (GTZ) says the equation that more money equals more health is too simple to be true. He says success depends on four key factors: "people, politics, power and processes."

Many global health issues are backed up by powerful institutions. These institutions mobilize resources, implement programs and support research. But they do more than that. They create, sustain and negotiate portrayals of the issue: this is critical to the sustainability prospects on the global health agenda.

A Proposed Paradigm for Global Health [24]

1. Development for Health through international conventions such as the Promotion of the rights of the older population, the prevention and Control of communicable and Non Communicable diseases, the promotion of healthy lifestyles, access to medicines and gender protection.
2. Security for Health through the support to global organizations including capacity building for emergency preparedness and safeguarding the rights of refugees and IDP
3. Capacity for Health development to improve support to health systems and coordination amongst stakeholders especially UN agencies
4. Information and knowledge for health such as the support of national, regional and global observatories to build Evidence for health and social development.
5. Partnerships for health through cooperation with Civil Society, Private sector, greater effectiveness of UN agencies and involvement of communities.
6. Performance for health to support good work ethics, develop strategies for accountability and promote responsiveness to communities

Conclusion

With the aging of Arab countries' population, maintaining health and independence in old age will become increasingly challenging. Changes are required in the systems and health care resources and in the type and direction of health-care services delivered.

Countries in the region are at different stages in their demographic and epidemiologic transition and concerns related to chronic diseases in old age may vary in priority and significance from one country to another. However, sustainability remains the most important dimension facing practice, notably in resource scarce settings.

Improvements to the health and social services of older cohorts can be made possible through a combination of changes in risk behaviors, enhanced primary and secondary preventive health services, increased health literacy, coordinated healthcare systems, additional professional resources in Geriatrics and Gerontology, reinforcement of family based care, innovative culture-specific modalities of interventions and policy integration across a number of governmental and non-governmental agencies.

There is a need for renewed global institutions for funding and the development and global public goods. Health cannot be seen merely as a purely professional and technical endeavor: it needs the strong voice and support of civil society and of political leaders to address the issues at stake.

The pressures on health systems to deliver quality care to ageing populations are also universal, and can best be addressed with better international collaboration[25] and efforts to assist countries towards self-reliance[26]. Supporting the establishment of global health institutions in less privileged countries ought to become one of the priorities of global health efforts[27].

Global Treaties and Conventions

Ageing

1- The first formal studies of ageing appear to be those of Muhammad ibn Yusuf al-Harawi (1582) in his book Ainul Hayat. The original manuscript of Ainul Hayat was scribed in 1532. The book discusses behavioural and lifestyle factors putatively influencing ageing including diet, environment and housing conditions. Also discussed are drugs that may increase and decrease ageing rates. (Wikepedia).

2- The first International Plan of Action on Ageing was adopted at the first World Assembly on Ageing in Vienna, 1982. It has guided the course of thinking and action on ageing over the past 20 years, as crucial policies and initiatives evolved. Issues of human rights for older persons were taken up in 1991 in the formulation of the United Nations Principles for Older Persons which provided guidance in the areas of independence, participation, care, self-fulfillment and dignity.

3- The Madrid International Plan of Action on Ageing (MIPAA) 2002 calls for changes in attitudes, policies and practices at all levels in all sectors so that the enormous potential of ageing in the twenty-first century may be fulfilled. Many older persons do age with security and dignity, and also empower themselves to participate within their families and communities. The aim of the International Plan of Action is to ensure that persons everywhere are able to age with security and dignity and to continue to participate in their societies as citizens with full rights.

4- A society for all ages, which was the theme for the 1999 International Year of Older Persons, contained four dimensions: individual lifelong development; multigenerational relationships; the interrelationship between population ageing and development; and the situation of older persons. The International Year helped to advance awareness, research and policy action worldwide, including efforts to integrate the issue of ageing in all sectors and foster opportunities integral to all phases of life.

5- The International Network for the Prevention of Elder Abuse INPEA was established in 1997. INPEA is an independent, Non Profit, incorporated under the Laws of the Commonwealth of Massachusetts, USA. INPEA, Inc., functions as a Non Governmental Organization (NGO) with Special Consultative Status to EcoSoc, UN Department of Economic and Social Affairs (DESA), and is affiliated with UN DPI. INPEA, Inc. is also a member of the Conference of NGO's (CoNGO). INPEA, Inc. enjoys a collaborative relationship with the International Association of Gerontology and Geriatrics (IAGG).

Non Communicable Diseases

1. Global Strategy for the Prevention and Control of Non Communicable Diseases 2000
2. WHO Framework Convention on Tobacco Control 2003
3. Global Strategy on Diet, Physical Activity and Health 2004
4. Resolution WHA60.23 on Prevention and control of non-communicable diseases:
5. Implementation of the global strategy 2007
6. WHO Report on the Global Tobacco Epidemic, 2008 - The MPOWER Package 2008
7. Resolution WHA61.4 on Strategies to reduce the harmful use of alcohol 2008
8. Medium-term Strategic Plan 2008-2013 on NCDs
9. Action Plan for the Global Strategy for the Prevention and Control of Non communicable Diseases 2008-2013
10. NCD Global Monitoring Framework
11. Draft comprehensive mental health action plan 2013-2020
12. Updated Revised draft global action plan for the prevention and control of NCDs covering the period 2013 to 2020
13. UN high-level meeting on NCD prevention and control

End Notes

1- Lebanon, for example, CVDs account for around 60% of all-cause mortality in persons aged 50 years and older [Sibai et al., 2001]28, and in Syria and Jordan, they contribute to 45.0% and 35.0% of total mortality in all age groups, respectively [Maziak et al., 200729; Zindah et al., 2008]30. In Egypt, reported deaths from CVD have risen steadily between 1961 and 2000, from 4.0% to around 43% [CAPMAS 2004]31. In Oman and

[24] Based on Margaret Chan's keeping promises, WHO, June 2012

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the West Bank, circulatory diseases contribute to the highest mortality rates for both men and women [Ganguly et al., 200932; Abu-Rmeileh et al., 2008]33

2- While older men in Bahrain, Egypt, Jordan, Lebanon, Morocco, and Tunisia appear to show relatively high prevalence rates of smoking, ranging between 30 and 50 per cent, contemporary rates in Oman and the UAE are much lower (7-15 per cent) (Yount and Sibai, 2009). Among older women, smoking prevalence is, to date, notably low, and except for a few countries Bahrain (24.8 per cent) and Lebanon (17.3 per cent), the consumption of cigarettes among women does not exceed 5 per cent in the remaining Arab countries. Tobacco use is the number one cause of preventable premature death, and intervention efforts addressing cigarette smoking provide the highest return on investments.

3- Overall, civil servants enjoy better coverage and higher benefits compared to those employed in the private sector, and older persons who have worked in the informal sector often do not qualify for old-age coverage. This also means that Arab women, often engaged in unpaid work in family income or in caring for grandchildren, are often denied access to health benefits as they age.

4- A framework by Shiffman34 proposed a set of 11 factors in 4 categories to explain the lack of global political attention: (i) the strength of the actors involved in an issue; (ii) the ideas they use to understand and position the issue; (iii) the nature of the political contexts in which these actors operate; and (iv) inherent characteristics of the issue itself.

5- Sociologists (Benford and Snow) have explored why some frames resonate and others do not35. They speak of two characteristics: credibility and salience. Credibility has to do with how truthful people perceive the frame to be; salience with how central it is to their lives. Future research on the rise and fall of global health issues would do well to study the way policy communities develop ideas and build institutions.

Friends of Europe Development Policy Forum (DPF) discussion paper in partnership with Europe's World on the occasion of the European Development Days 2010

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