The Landscape of Ageing Research in Arab Countries: Ethics in Ageing Research

A scoping review of two decades

Abla Mehio Sibai

Department of Epidemiology and Population Health
Faculty of Health Sciences - American University of Beirut
am00@aub.edu.lb

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Outline

• Ageing in the Arab region
• Older people in policies, programs and research
• Scoping review of ageing research in Arab countries (1994-2013)
  • Pilot study: aim and methods
  • Results
  • Key implications
Introduction

Ageing

• Dramatic increases in life expectancy since beginning of past century

• Between 1950 and 2000, LE increased on average by eight years → Modernity, economic development, and advances in knowledge and technology

• Increases in ageing population,
  – faster among the older age groups
  – faster in developing countries
Pace of Ageing worldwide


14% of Population Age 65+

France  Sweden  U.K/ Germany  U.S.A  Japan  Taiwan China

115 years  80 years  45 years  65 years  26 years  25 years  29 years
# Demographic achievements in the Arab world

<table>
<thead>
<tr>
<th></th>
<th>1975</th>
<th>2000</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate</td>
<td>6.8</td>
<td>3.7</td>
<td>3.2</td>
</tr>
<tr>
<td>Crude mortality rate per 1000</td>
<td>12.8</td>
<td>7.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Life expectancy at birth</td>
<td>55.0</td>
<td>67.0</td>
<td>73.4</td>
</tr>
<tr>
<td>Percentage older than 65</td>
<td></td>
<td>3.9%</td>
<td>6.7%</td>
</tr>
<tr>
<td>Older population 65+ (millions)</td>
<td>5.8</td>
<td>10.4</td>
<td>21.3</td>
</tr>
</tbody>
</table>

*Source: Sibai AM, Kronfol N (2007). Situation analysis of population ageing in the Arab Countries: For UN-ESCWA*
Percentage of population 65+ in Arab countries, 2005

4.1% of the 360 million Arab persons are older than 65 years and 13 out of the 22 Arab states have reached a life expectancy at birth higher than 70 years (Alwan et al., 2012)

Percentage of population 65+ in Arab countries, 2005-2050

Yet,

- The implications of an ageing society are not acknowledged by policy makers, donor agencies and are under-researched.
- Older people are often ‘invisiblized’ in policy and programs.
- Overall: (except for Qatar) low research output and funding for scientific research (UNDP, 2009; Ismail et al., 2013).

Expenditure on research (UNESCO, 2010)

- In Arab countries does not exceed 0.3% of its GDP.
- In developed countries: 2.8-3.5%.
- In developing countries: 1.1% in Brazil and 1.3% in Spain.
Yet,

- They are often excluded from studies that implicate them
- Older persons are a heterogeneous demographic category (from 60 years to 100+). Physiology, life experience and attitudes differ across sub-groups of ‘older persons’
- In research, they constitute vulnerable study subjects
- They are often involved in research by proxy. This should not be the norm and only done for good and stated – and exceptional – reasons

Source: Ethical considerations in research involving older persons. Specialist research ethics guidance paper. http://www.sheffield.ac.uk/polopoly_fs/1.165643!/file/SREGP-Older-People.pdf
Ethical Considerations in research involving older people

• Consent may be challenging from those who:
  – Are in some way dependent on family or professional carers or others
  – Have diminished cognitive capacity
  – Live in institutional settings

• **Ethical questions**: Do we seek consent of family carers? Do we exclude older persons with dementia or Alzheimer's? Do we avoid studies on institutionalized older persons?

*Source*: Ethical considerations in research involving older persons. Specialist research ethics guidance paper. [http://www.sheffield.ac.uk/polopoly_fs/1.165643!/file/SREGP-Older-People.pdf](http://www.sheffield.ac.uk/polopoly_fs/1.165643!/file/SREGP-Older-People.pdf)
Study Aim and Objectives

- Map ageing research in the region
  - Pilot study: Assess trends in reporting of ethical research practices (IRB approval and Consent) as these appear in the publication
  - Map these against differentials in publication output including impact factor and co-authorship profile
Methods: Scoping Review

• Definition
  – Searching the literature on broad topics to determine what has been published and gaps in the existing evidence

• Methods
  – Web of Science, Ovid MEDLINE, SCOPUS, JSTOR, and IMEMR were searched for studies on ageing in Arab counties published in the past two decades (between January 1994 and December 2013)
  – Keywords included: Aging, ageing, older persons, elderly, Alzheimer's, dementia, gerontology, geriatrics, ADL, palliative care, osteoporosis, stroke AND Arab countries individually (22)
  – Qualified librarians were consulted regarding the search strategy, selection of the databases, and the exportation of records.
Methods

• The electronic database search was iterative and involved a reflexive approach. Steps were repeated with revised search terms to ensure a comprehensive assessment of the literature.

• **Full spectrum of academic publications included:** Peer and non-peer reviewed original research studies, reviews, editorials, opinion pieces, commentaries and abstracts.
Methodology

• No language restrictions were specified
• Laboratory–based animal studies and in-vitro studies were excluded
• A final list of 621 records were considered for analysis
• Examples of variables: Journal title, first and corresponding author, institutions, focus of paper, study design, co-authorship, funding sources, impact factor of journal (as proxy measure for publication value)
Ethical Research Practice

- Main objective: Ageing research landscape in Arab countries
- Secondary objective: reporting ethical practices in ageing research

- Assessed through a statement in the manuscript of some form of ‘Institutional Review Board approval’ and of ‘consent’ received from study participants and coded as:

<table>
<thead>
<tr>
<th>IRB Approval</th>
<th>Consent received</th>
</tr>
</thead>
<tbody>
<tr>
<td>0=Not mentioned</td>
<td>0=Not mentioned</td>
</tr>
<tr>
<td>1=Yes, mentioned</td>
<td>1=Yes, verbal</td>
</tr>
<tr>
<td>2=N/A</td>
<td>2=Yes, written</td>
</tr>
<tr>
<td></td>
<td>3=Yes</td>
</tr>
<tr>
<td></td>
<td>4=N/A</td>
</tr>
</tbody>
</table>

- The N/A includes publication in the form of commentaries, editorials or opinion pieces
# Results

## Ageing Research output

<table>
<thead>
<tr>
<th>Income Level</th>
<th>Country</th>
<th>Ageing publications (1994-2013)</th>
<th>Ageing publications per million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Comoros</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Somalia</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Lower-Middle</td>
<td>Djibouti</td>
<td>1</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Egypt</td>
<td>132</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>Mauritania</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Morocco</td>
<td>37</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Palestine</td>
<td>8</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Sudan</td>
<td>15</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Syria</td>
<td>3</td>
<td>0.1</td>
</tr>
<tr>
<td></td>
<td>Yemen</td>
<td>4</td>
<td>0.2</td>
</tr>
<tr>
<td>Upper-Middle</td>
<td>Algeria</td>
<td>9</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>Iraq</td>
<td>11</td>
<td>0.4</td>
</tr>
<tr>
<td></td>
<td>Jordan</td>
<td>46</td>
<td>7.1</td>
</tr>
<tr>
<td></td>
<td>Lebanon</td>
<td>88</td>
<td>20.3</td>
</tr>
<tr>
<td></td>
<td>Libya</td>
<td>11</td>
<td>1.8</td>
</tr>
<tr>
<td></td>
<td>Tunisia</td>
<td>66</td>
<td>6.2</td>
</tr>
<tr>
<td>High*</td>
<td>Bahrain</td>
<td>19</td>
<td>15.2</td>
</tr>
<tr>
<td></td>
<td>Kuwait</td>
<td>35</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Oman</td>
<td>19</td>
<td>6.8</td>
</tr>
<tr>
<td></td>
<td>Qatar</td>
<td>19</td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td>KSA</td>
<td>99</td>
<td>3.6</td>
</tr>
<tr>
<td></td>
<td>UAE</td>
<td>32</td>
<td>3.8</td>
</tr>
</tbody>
</table>
Results

Publication rates and ageing indicators

Life Expectancy (years)

Ageing publications per million

Somalia
Djibouti
Comoros
Iraq
Syria
Egypt
UAE
Qatar
Kuwait
Oman
Jordan
Tunisia
Lebanon
Bahrain
Results

Publication rates and development indicators

GDP per capita ($US) (2011)

Ageing publications per million

- Lebanon
- Bahrain
- Kuwait
- Qatar
- Jordan
- Tunisia
- Oman
- Saudi
- UAE
- Arabia
Results

• Findings indicate that ageing research has increased five-fold across the two decades

• IF varied between 1.642 and 1.913 (with one outlier of 1.329 in the early years)
Results

Middle-income countries:
- Highest impact of publishing
- Sharpest rise

Tunisia, Morocco, Lebanon and the UAE have been particularly strong performers (2.076-2.369).
Results

• Amongst eligible population-based publications (n=493)
  – Less than half mentioned IRB approval or consent of study participants
Results

- Proportion of publications citing ethical research practice increased with **time**
Results

- Proportion of publications citing ethical research practice was higher in publications appearing in high impact journals.
Results

- Proportion of publications citing ethical research practice increased with **regional and international collaboration**
Findings and key implications

• Arab researchers have not yet produced a critical mass of scholars interested specifically in ageing research and older adult issues, as has been the case for example with reproductive health
• Most of the studies conducted were disease-centered, descriptive in nature, relying mostly on cross-sectional study designs

With regard to ethical considerations,
• This review brings to light the potential vulnerability of older persons in research
• Nevertheless, it warrants comparative assessment with research involving other vulnerable population groups
• The review calls for strengthening Institutional Review capacities within Arab countries
Thank you

If interested, visit website Center for Studies on Aging
www.csa.org.lb

and consider joining the Arab Ageing Network
Phaw-aan@aub.edu.lb