# Psychosocial, Health,and Economic Aspects of an Elderly Armenian Population in Lebanon 

By Choghik Melkon Boulghourjian American University of Beirut<br>\section*{Introduction}

To study how older people are treated within a society and how the elderly attest with the unavoidable problems of aging, particularly those involving health and income is of immense importance today. Health problems include normal losses in hearing, eyesight, and memory, and the increased likelihood of chronic diseases. Economic problems include loss of employment and therefore significant decreases in income and reliance on pensions, and social security. Social problems include greater difficulty to maintain social relationships because of health limitations, death of family members and friends, loss of work mates and lack of transportation.

The present generation is probably the first in history to be raised with the expectation of old age, with about $20 \%$ of all humans who have passed the age of 65 , now alive (US Bureau of the Census, 1993).

The principal objectives of the study are:

- to appraise the demographic, social and economic characteristics of the elderly population among the Armenian community in Lebanon.
- to assess physical and mental health in the elderly population in consideration with other factors such as social, and economic and
-to examine how these processes vary among elderly living in the nursing home and those living in the community.


## Methodology

Selection of Study Area: It was necessary to commence with the one nursing home that belonged to the Armenian community, which was located in the Bourj-Hammoud district. This area is a suburb of Beirut City, actually located East of Beirut. Most of the housing resembles squatter settlements, though these apartment buildings also exist. One particular area had been set up several decades ago, immediately after World War I, to house the poverty-stricken Armenians who had fled from the massacres perpetrated by the Turks, to Lebanon. This area was essentially a camp bequeathed by the Lebanese Government, where the Armenians could lodge and find some sort of shelter. These shacks are still in use today, by those who
have not climbed the paths of societal orders. The apartments referred to above, generally were equipped with electricity, water supplies, toilet and bathing facilities. However, there were quite a few without heating facilities. The second district from which samples were selected was Achrafieh, also a suburb of Beirut city, located East of Beirut city but West of BourjHammoud. Achrafieh is relatively a large district with several different grades of socioeconomic backgrounds. In general, however, it is far better off socioeconomically, than BourjHammoud, with generally, better housing conditions.

Sampling Procedure: The sample for this study included two groups of elderly people: nursing home residents and community dwellers over the age of 65 . A total of 94 nursing home (all residents $>65$ years of age) residents were interviewed. In order to compare the characteristics of the nursing home population with elderly living in the community, a sample size of 142 was determined. The procedure for selecting this sample from the community follows the nested case control rules since a strict neighborhood case control was not feasible. The questionnaire used was that developed by the Older Americans Resources Program at Duke University (Duke OARS), Multidimensional Functional Assessment Questionnaire (OMFAQ). Some questions were modified to suit the environment of the study population. In addition to the OMFAQ, general questions were added to fulfill the objectives of the study.

Table 1. Distribution of Elderly Population by Age and Sex (\%)

|  | Sex |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Age | Males | Total | Females | Total | Sex Ratio <br> $(\mathbf{M / F})$ |
| $65-74$ | 40.4 | $(16.1)$ | 35.8 | $(24.2)$ | 66.52 |
| $75-84$ | 28.6 | $(9.3)$ | 33.3 | $(22.5)$ | 41.33 |
| $85-89$ | 16.9 | $(5.5)$ | 18.9 | $(12.7)$ | 43.31 |
| $90-94$ | 5.2 | $(1.7)$ | 9.4 | $(6.4)$ | 0.3 |
| $95-100$ | - | - | 2.5 | $(1.7)$ | - |
| Mean <br> Age | $[75.7]$ |  | $[78.2]$ |  |  |
| N | 77 <br> $(32.63)$ | $(236)$ | 159 <br> $(67.37)$ | $(236)$ | 48.43 |

## Results and Discussion

Age and Sex: Table 1 reveals the age and sex distribution of the elderly study population in the Armenian community. The mean ( $\pm$ SD) age of the study elderly population was 77.4 $( \pm 8.7)$ years. The average ages for males and females were quite close - 75.7 years and 78.2 years respectively.

While the ages of the 206 elderly were accurate (ie. based upon date of birth recorded in a passport or ID), there were 30 persons whose age was estimated by the caregivers. The ages of those who did not know their dates of birth ranged from an estimated low of 67 to an estimated high of 100 years.
demographic characteristics of any given population. The percentages of female singles and female widows ( $25.8 \%$ and $62.9 \%$ respectively) were quite high compared to their male counterparts ( $20.8 \%$ and $23.4 \%$ respectively). More than half the males were married $(50.6 \%)$ compared to only $11.3 \%$ of the females. The percentage of widowed was far greater for females than for males ( $62.9 \%$ and $23.4 \%$ respectively), most women having married men much older than themselves. Spending their old age without their spouses places elderly women at a disadvantage. However, to understand some of the other social characteristics, we must look at the marital status of these elderly, according to their place of residence (Table 3).

Analogous to the literature, the typical nursing home residents are single, and in our case, also widowed females ( $39.7 \%$ and $56.2 \%$ respectively). While institutionalized males also fell in these two categories, there were more single males than widowers $(57.1 \%$ and $28.6 \%$ respectively). Only $14.0 \%$ of females and $7.1 \%$ of males who lived at home were single. The percentage of married males, living at home ( $67.9 \%$ ) compared to $17.4 \%$ for females could be explained by the male lower life expectancy and the fact that most of these men have married women by far younger than themselves.

## Economic Characteristics

Employment Status: Old age brings with it major life transitions, including retirement. The study population revealed the following situations concerning employment (see tables 4 and 5):

Place of Residence: Table 2 shows the distribution of the study population by place of residence, age group and sex.

Ninety four subjects were institutionalized elderly and 142 lived at home. Of the 94 nursing home residents 21 were males and 73 were females (with a sex ratio of $28.76 \%$ ), while there were 56 males and 86 females (with a sex ratio of $65.11 \%$ ) out

- The non-working population is much larger than the working one. This is due to two main factors: (1) the decline in the physical and mental health of the elderly; (2) the official age of retirement in Lebanon ( 64 years). Working status was also naturally affected by the place of residence. Elderly males living at home were more involved in economic activities ( $56.4 \%$ ) than those living in the institution ( $7.7 \%$ ). The same of 142 elderly living at home. The lower sex ratio in the nursing home is in fact envisaged by Cavanaugh (1993) where the "typical nursing home resident" revealed to be a single, very old female. However, controlling for sex, the percentage of the age group 65-74 living at home was the highest ( $52.8 \%$ ), the percentage of the same age group was lowest among institutionalized elderly (21.3\%). This indicates that higher proportions of young olds (65-74) are living in the community, whereas higher proportions of oldest old are living in the institution. This was true for males as for females.

Marital Status: Marital status is plausibly one of the most important determinants of socio-

Table 3. Distribution of Material Status by Place of Residence and Sex (\%)

|  | Place of Residence |  |  |  |  |  |
| :---: | ---: | :---: | :---: | ---: | ---: | :---: |
|  | Home |  | Institution |  |  |  |
| Sex | Males | Females | Total | Males | Female | Total |
| Marital <br> Status |  |  |  |  |  |  |
| Single | 7.1 | 14.0 | $(11.3)$ | 57.1 | 39.7 | $(43.6)$ |
| Married | 67.9 | 17.4 | $(37.3)$ | 4.8 | 4.1 | $(4.3)$ |
| Widowed | 21.4 | 68.6 | $(50.0)$ | 28.6 | 56.2 | $(50.0)$ |
| Divorced/ <br> Separated | 3.6 | - | $(1.4)$ | 9.5 | - | $(2.1)$ |
| N | 56 | 86 | 142 | 21 | 73 | 94 |

Table 4. Distribution of The Employment Status of the Elderly by Place of Residence and Age Group (\%)

|  | Employment Status |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: |
|  | Working |  |  |  | Not Working |  |
| Age | Home | Institution | Home | Institution | N |  |
| $65-74$ | 29.1 | 4.3 | 50.0 | 16.1 | 93 |  |
| $75-84$ | 7.1 | - | 56.3 | 36.7 | 71 |  |
| $85+$ | 1.8 | 3.7 | 37.2 | 57.3 | 54 |  |
| Total | $(9.2)$ |  |  | $(90.8)$ |  | 218 |

Table 5. Distribution of The Employment Status of the Elderly by Place of Residence and Sex (\%)

|  | Employment Status |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Working |  |  |  |  | Not Working |  |
| Sex | Home | Institution | Home | Institution | Total |  |
| Males | 56.4 | 7.7 | 18.4 | 9.5 | $(34.4)$ |  |
| Females | 28.2 | 7.7 | 41.3 | 30.7 | $(65.6)$ |  |
| N | $39(17.89)$ | $179(82.11)$ |  | 218 |  |  |

"semiskilled - operative" and "service - worker" levels. Females showed a slightly different picture. While $33.3 \%$ of those who lived at home were of the "skilled" type, 30.7\% lay in the "service worker" sector. The figures for institutionalized women were different. Here, the majority were "semiskilled - operative" type, followed by "service - workers" ( $38.2 \%$ and $32.3 \%$ respectively).

Educational Levels: Altogether, the large percentages seen in the lower ranking jobs may be attributable to different educational levels, (see table 6). With a large group ( $68.7 \%$ ) having only primary education we see a large number of institutionalized elderly working in jobs not requiring any particular level of education. Therefore, the high figures seen in low level occupations can, to some extent, be attributed to the high percentages of low-level education. This aspect, however, proved to be problematic for institutionalized elderly where most inmates do not provide intellectually stimulating conversations, or even any frivolously pleasant chit-chat to the few who are well-educated.
holds true for females ( $28.2 \%$ and $5.5 \%$ respectively). This could be explained by the fact that the majority of nursing home residents were among the oldest old, as opposed to the majority of community dwellers.

- The figures for males and females were identical for institutionalized elderly. This could be due to the very large number of institutionalized women who are single, and therefore had had to work during their younger years and continue to work in the institution.
- The highest figures of employment lie in the youngest age group - where $33.4 \%$ of the elderly between 65-74 are working; $7.1 \%$ for the $75-84$ age group and $5.5 \%$ for the $>85$ age group. Of course, percentages for those living at home are higher than those of the institutionalized - except for the $>85$ age group. Institutionalized elderly are assigned light duties such as working as telephone operators, distributing lunch to a few other elderly, feeding the ones who could not feed themselves and shaving the older men (a man in his 70's, who had been a barber prior to retirement had undertaken this duty), integrating work with the nursing home environment and feeling rather useful. Nonetheless, of the 39 elderly who were working, the greater number were involved in service type work and the rest had their own small businesses to run.
- By and large, elderly living at home were in the higher occupational statuses prior to retirement than elderly living in the institution. While males at home had more or less "skilled - foreman" as well as "manager - proprietor" types of jobs ( $25.4 \%$ and $20.0 \%$ respectively), institutionalized males were mostly classified at the

Table 6 shows that elderly living at home presented a higher percentage of primary level education in females, while all other educational levels weighed toward males. The exact opposite is seen in the institutionalized coterie - number of males with only primary education ( $89.5 \%$ ) proved to be higher than the corresponding figure for females ( $66.7 \%$ ); whereas in the rest of the categories, females outnumbered males. One reason for the difference may be that this generation, in general, had not had much of an education to start with. Also, females who were unmarried were also the more educated - this was in fact an illustration of the fact that the majority of males with higher education had not particularly married an equally educated wife. Females on the other hand, with a relatively high level of education had waited for equally

Table 6. Educational Level of the Elderly by Place of Residence and Sex (\%)

|  | Place of Residence |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Home |  |  | Institution |  |  |
| Sex | Males | Females | Total | Males | Females | Total |
| Educational <br> Level |  |  |  |  |  |  |
| Primary | 52.8 | 75.6 | $(66.7)$ | 89.5 | 66.7 | $(72.4)$ |
| Secondary | 30.9 | 22.1 | $(25.5)$ | 5.25 | 22.8 | $(18.4)$ |
| College | 7.2 | 1.15 | $(3.5)$ | 5.25 | 8.8 | $(7.9)$ |
| Post Graduate | 9.1 | 1.15 | $(4.3)$ | - | 1.7 | $(1.3)$ |
| N | 55 | 86 | 141 | 19 | 57 | 76 |

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Table 7. Self Rated Income Adequacy Level of the Elderly by Age/Sex (\%)

|  | Income |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Age $^{*}$ | Ample to <br> Adequate | Somewhat <br> Inadequate | Totally <br> Inadequate | $\mathbf{N}$ |
| $65-74$ | 12.8 | - | 87.2 | 86 |
| $75-84$ | 7.1 | - | 92.9 | 70 |
| $85+$ | 11.1 | - | 88.9 | 45 |
| Total | $(10.4)$ | - | $(89.6)$ | 201 |
| Sex* |  | - |  |  |
| Males | 17.6 | - | 82.4 | 68 |
| Females | 6.8 | - | 93.2 | 133 |
| Total | $(10.4)$ | - | $(89.6)$ | 201 |

* No Significance.
** X2 $=5.693, \mathrm{P}=0.01703$ ( $\mathrm{P}<0.05$.)
Table 8. Informant Rated Income Adequacy by Age/Sex (\%)

|  | Income |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Age $^{*}$ | Ample to <br> Adequate | Somewhat <br> Inadequate | Totally <br> Inadequate | $\mathbf{N}$ |
| $65-74$ | 54.5 | 36.4 | 9.1 | 66 |
| $75-84$ | 57.9 | 36.8 | 5.3 | 57 |
| $85+$ | 51.7 | 43.3 | 5.0 | 60 |
| Total | $(54.6)$ | $(38.8)$ | $(6.6)$ | 183 |
| Sex |  |  |  |  |
| Males | 50.0 | 44.2 | 5.8 | 52 |
| Females | 56.5 | 36.6 | 6.9 | 131 |
| Total | $(54.6)$ | $(38.8)$ | $(6.6)$ | 183 |



Picture Credit: Choghik Boulghourjian

> 1 could never imagine myself in this situation, alone, in a nutsing home

* No Significance.
** No Significance.
or more educated husbands, such as Miss. A. who admitted, "if I hadn't been so picky about the standard of education my future husband should have, I probably wouldn't be here now".

Income Levels and Reserves: The major outcome of retirement is manifested by steep declines in income levels. Self rated and informant rated income levels are given in tables 7 and 8 , respectively.

While income levels drop or disappear altogether, elderly who have reserves (which may include liquid money, or assets such as bank accounts, houses, lands, etc.) feel, at least, more secure in their old age. Table 9 shows the income adequacies by place of residence, and table 10 shows the presence and absence of reserves by place of residence.
Greater percentages of institutionalized elderly had no reserves. Elderly living at home were more likely to have reserves as opposed to institutionalized elderly. There is a significant


Picture Credit: Choghik Boulghourjian

Table 9. Income Adequacy Level of the Elderly by Place of Residence (\%)

|  | Income |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age $^{*}$ | Ample to <br> Adequate | Somewhat <br> Inadequate | Totally <br> Inadequate | $\mathbf{N}$ |
| Home | 59.6 | 27.0 | 13.5 | 89 |
| Institution | 50.0 | 50.0 | - | 94 |
| Total | $(54.6)$ | $(38.8)$ | $(6.6)$ | 138 |

$\mathrm{X} 2=19.688 \mathrm{P}=0.00005(\mathrm{P}<0.05)$.
Table 10. Presence/Absence of Reserves of the Elderly by Place of Residence and Sex (\%)

|  | Place of Residence |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Home |  |  | Institution |  |  |
| Reserves | Males | Females | Total | Males | Females | Total |
| No Reserves | 32.1 | 33.7 | $(33.1)$ | 85.7 | 83.6 | $(84.0)$ |
| Reserves Present | 67.9 | 66.3 | $(66.9)$ | 14.3 | 16.4 | $(16.0)$ |
| N | 56 | 86 | 142 | 21 | 21 | 94 |

cooking and toilet facilities did not differ significantly between institutionalized and non-institutionalized elderly. Therefore these factors might not have been "push factors" for institutionalization. However, very significant differences are observed between home and nursing home residents when bathing and heating facilities are considered (only $80.8 \%$ and $19.2 \%$ of institutionalized elderly actually had these facilities respectively). In the nursing home most of the elderly complained of "feeling cold", since most of the workers did not need the heaters to be turned on (they always felt warm), even during some of the coldest days in the winter when the nursing home was cold.

Physical Health Status: A highly significant relationship was found between age and amount of medical treatment. By amount of medical treatment is meant the number of medications an elderly person is prescribed. $37.9 \%$ of the $>85$ age group received extensive medical treatment. The percentage dropped to only 9.5 and 9.3 for the age groups 65-74 and 75-84, respectively. Concurrently 70.5\% of the 65-74 year olds received routine medical treatment as well as $69.3 \%$ of the $75-84$ year olds and $51.5 \%$ of the $>85$ group.

* Males: X2 $=17.607 \mathrm{P}=0.00003(\mathrm{P}<0.05)$
* Females X2 $=39.929 \mathrm{P}=0.00000(\mathrm{P}<0.05)$
decline in the number of elderly with reserves with age; $54.5 \%$ of the youngest age group have some reserves, while $30.0 \%$ of the 75-84 year olds and only $15.5 \%$ of the $>85$ group had reserves.

Housing conditions: Table 11 shows the state of housing conditions. The old felt safe from theft and intruders, but their major complaints were factors such as humidity which was a major problem. It was repeatedly mentioned that during winter, rain water would infiltrate through the walls, leaving the house damp, humid, and unhealthy.
However, looking at these housing conditions with regard to place of residence may reveal some important reasons and justifications for moving. Safety, availability of drinking water,

Table 11. Housing Conditions of the Elderly Living at Home and Institution (\%)

| Condition: | Per Cent | N |
| :--- | :---: | :---: |
| Feeling Safe | 67.5 | 197 |
| Feeling Fairly Safe | 28.9 | 197 |
| Have Drinking Water | 91.2 | 193 |
| Have Cooking Facilities | 95.3 | 192 |
| Have Toilet Facilities | 99.0 | 192 |
| Have Bathing Facilities | 90.1 | 192 |
| Have Heating Facilities | 67.2 | 192 |

There were no significant differences between males and females in the amount of medical treatment received, although slightly more females had extensive treatment and this is because of the slightly higher average age of females. Another possible reason for the differences in medical intake between the sexes could be the physiologic factors which affect women more than men in old age - including osteoporosis and heart disease (risk of heart disease increases with age more so for females than males, because of decreasing estrogen levels after menopause). Institutionalized elderly receive significantly more medication than do the non-institutionalized elderly ( $33.0 \%$ and $7.0 \%$ respectively).

Table 12. Self Rated Physical Health of the Elderly by Age/Sex (\%)

|  | Self Rated Physical Health |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Poor | Fair | Excellent-Good | N |
| Age $^{*}$ |  |  |  |  |
| $65-74$ | 78.3 | 15.2 | 6.5 | 92 |
| $75-84$ | 73.1 | 26.9 | - | 67 |
| $85+$ | 79.5 | 15.9 | 4.5 | 44 |
| Total | $(76.8)$ | $(19.2)$ | $(3.9)$ | 203 |
| Sex |  |  |  |  |
| Males | 70.0 | 22.9 | 7.1 | 70 |
| Females | 80.5 | 17.3 | 2.3 | 133 |
| Total | $(76.8)$ | $(19.2)$ | $(3.9)$ | 203 |

[^0]Although very few admitted to actually having excellent-good health (almost $4 \%$ of the total study population), about 20\% rated themselves as fairly well. The other $76 \%$ considered themselves as having poor health. A reason for the high percentage of perceived poor health could be due to personality factors where different life exposures could have resulted in a depressive, socially isolated group of people. Many of these elderly have been exposed to extremely tragic situations - some have lost siblings and offspring to the war, some have become handicapped themselves, and others simply lost their life's savings. Their memories trace back to these extreme events, disheartening their already vulnerable conditions. De facto, looking at perceived health, there were no significant differences observed between the sexes. However, more males $(7.1 \%)$ as opposed to females $(2.3 \%)$ had excellent to good health. No significance was observed while taking age into account. The $>85$ age group stated having poor health the most ( $79.5 \%$ ), and when an overall physical health rating was computed, the discrepancy stood out clearly.

Table 13. Physical Health Rating of the Elderly by Age and Sex (\%)

|  | Physical Health Rating Total |  |  |
| :--- | :---: | :---: | :---: |
|  | Mild-Moderate <br> Impairment | Severe-Total <br> Impairment | N |
| Age" |  |  |  |
| $65-74$ | 77.9 | 22.1 | 95 |
| $75-84$ | 74.7 | 25.3 | 75 |
| $85+$ | 59.1 | 40.9 | 66 |
| Total | $(71.6)$ | $(28.4)$ | 236 |
| Sex |  |  |  |
| Males | 77.9 | 22.1 | 77 |
| Females | 68.6 | 31.4 | 156 |
| Total | $(71.6)$ | $(28.4)$ | 236 |

* There are only two categories of health rating because no one was rated as having excellent-good health
** $\mathrm{X} 2=7.278, \mathrm{P}=0.02627(\mathrm{P}<0.05)$
*** No significant Relationship

Table 13 indicates that there is no significant relationship observed between the sexes. Males and females showed similar patterns; however, more females were afflicted ( $31.4 \%$, as opposed to males, $22.1 \%$ ). There were however, significant differences observed, with older olds being sicker. Besides the above observations, differences in self-rated physical health were not significant between institutionalized and noninstitutionalized elderly. In fact, they were almost the same. Activities of Daily Living (ADLs) are important considering the overall health of the elderly individuals because if an elderly is unable to perform routine tasks, such as preparing meals, or getting dressed, there usually is an underlying cause,


Picture Credit: Choghik Boulghourjian
morbid in nature. The majority of 65-74 year olds had excellent-good ADLs ( $36.0 \%$ ), while a large majority of the $>85$ group ( $61.5 \%$ ) were "totally impaired". Although significant differences were not found between males and females, again, female elderly were more likely to be impaired, essentially being older, and exhibiting more morbidity than males. The underlying reason for the discrepancy between males and females may be attributed to the fact that the males who survived to old age were probably stronger and healthier physiologically than other males who died before them. Therefore, in general, they had healthier profiles than other males allowing them to survive longer than other males, as well as females.

Table 14. Major Helpers of the Elderly by Sex (\%)

| Major <br> Helper |  |  |  |
| :--- | :---: | :---: | :---: |
|  | For Males | For Females | Total |
| Spouse | 48.9 | 3.3 | $(18.5)$ |
| Sibling | 2.2 | 3.3 | $(3.0)$ |
| Offspring | 22.2 | 47.8 | $(39.3)$ |
| Grandchild | 2.2 | 1.1 | $(1.5)$ |
| Other Kin | 4.4 | 5.6 | $(5.2)$ |
| Friend | 6.7 | 12.2 | $(10.4)$ |
| Other | 13.3 | 26.7 | $(22.2)$ |
| N | $(13.3)$ | $(26.7)$ | 135 |

Table 14 is reasonably one of the most interesting. Almost $50 \%$ of the male elderly had their spouse taking care of them. The corresponding figure for females was a mere $3.3 \%$. This may not be too surprising after all. Female life expectancy being higher than male life expectancy, husbands probably die before they get a chance to see their wives age and therefore in need of their care. Female elderly were looked after by their children (47.8\%).

Mental Health : Physical illnesses and mental decadence are quite closely correlated. While one may be undergoing a negative change, it may also be catalyzing the others' deterioration (Zimbardo, 1988); mental health, therefore, is as important as physical health. Table 15 shows the intellectual capacity of the elderly Armenian population.

Table 16. Enjoyment of Life of the Elderly by Sex (Self Rated vs. Informant Rated) (\%)

|  | Enjoyment of Life (Self Reported) |  |  |
| :--- | :---: | :---: | :---: |
| Sex | Life not Exciting | Life Exciting | $\mathbf{N}$ |
| Males | 66.2 | 33.8 | 77 |
| Females | 88.7 | 11.3 | 159 |
| Total | $(81.4)$ | $(18.6)$ | 236 |
|  | Enjoyment of Life (Informant Reported) |  |  |
| Males | 42.0 | 58.0 | 50 |
| Females | 49.2 | 50.8 | 132 |
| Total | $(47.3)$ | $(52.7)$ | 182 |

* $\mathrm{X} 2=17.231, \mathrm{P}=0.00003(\mathrm{P}<0.05)$
** $\mathrm{X} 2=0.763, \mathrm{P}=0.382(\mathrm{P}<0.05)$

Table 15. Intellectual Capacity of the Elderly by Age/Sex (\%)

|  | Intellectual Capacity |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | Severe <br> Impact | Moderate <br> Impact | Mild <br> Impairment | Intact | N |
| Age |  |  |  |  |  |
| $65-74$ | 8.6 | 14.0 | 20.4 | 57.0 | 93 |
| $75-84$ | 34.8 | 20.3 | 17.4 | 27.5 | 69 |
| $85+$ | 58.0 | 14.0 | 8.0 | 20.0 | 50 |
| Total | $(28.8)$ | $(16.0)$ | $(16.5)$ | $(38.7)$ | 212 |
| Sex" |  |  |  |  |  |
| Males | 22.1 | 9.3 | 17.3 | 50.7 | 75 |
| Females | 32.1 | 19.7 | 16.1 | 32.1 | 137 |
| Total | $(28.8)$ | $(16.0)$ | $(16.5)$ | $(38.7)$ | 212 |

* $\mathrm{X} 2=47.891 \mathrm{P}=0.00000(\mathrm{P}<0.05)$
** $\mathrm{X} 2=9.117 \mathrm{P}=0.028$ ( $\mathrm{P}<0.05$ )

Interestingly, while there were significant differences by sex, there were significant differences by age also. While males and females equally contributed to the "severe impact" category, $50.7 \%$ males and $32.1 \%$ females were intact. To understand these differences one could say that the the educational level can predict performance in old age since the higher the education, the better the performance scores on intellectual capacity. More males had higher educational levels than females. Putting this in perspective with age, $58 \%$ of the $>85$ age group lay in the "severe impact" category as opposed to $34.8 \%$ in the $75-84$ age group and $8.6 \%$ in the 65-74 age group. The significant difference in the decline of intellectual capacity is clear; however, this decline may not necessarily be due to the aging process per se, but to the fact that the younger age groups had more access to education than did the older olds. Physiological factors also contribute indirectly, such as eyesight and hearing - when these senses have lost their acuity, they bring about lower levels of intellectual capacities.

Self "rated" psychiatric symptoms were measured by another set of questions. As opposed to intellectual capacity, psychiatric symptoms revealed the opposite relationship, i.e. a significant inverse relationship with age. As age increased, psychiatric symptoms decreased. A large percentage of the 65 74 age group ( $31.6 \%$ ) lay in the severe impact category, while $22.7 \%$ of the $75-84$ year olds and $21.2 \%$ of the $>85$ age group lay in this same category. This unexpected finding can only be explained in one possible way which is that people in good mental health may not adjust well to changing social and employment roles, as well as nursing homes (Wacker, 1988). This may indubitably lead to feelings of hopelessness, uselessness, unrest, and depressed moods, resulting in the development of negative psychiatric symptoms. This finding complements a study by Saxena and Kumar (1997) who found that mortality rates increased significantly during the few years immediately following retirement.

Enjoyment of life is another important component of overall mental health, which, if negatively inclined, has several repercussions including depression and deterioration of physical health (Butt and Beiser, 1994). No significant relationship was observed between age group and enjoyment of life as reported by the elderly or informant; although there was a slight positive inclination where increasing age was associated with decreasing percentages of enjoyment of life. Some positive congruence was observed between informant rated and self rated "enjoyment of life", although to a very small extent $(\mathrm{r}=0.354, \mathrm{p}=0.000)$. The main reason can be summarized as follows: if enjoyment of life, as mentioned above, is more affiliated to lifelong achievements, it is also related to satisfying intimate relationships (Zimbardo, 1988). The latter could have been lacking for many elderly in this study group because several had either married very early,

Table 17. Mental Health Ratings of the Elderly by Age/Sex (Self vs. Informant Rated)(\%)

| a | Mental Health Rating (Self Rated) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ExcellentGood | Mild- <br> Moderate Impairment | Severe-Total Impairment | N |
| Age $^{*}$   <br> 654   |  |  |  |  |
| 65-74 | 19.4 | 41.9 | 38.7 | 93 |
| 75-84 | 4.3 | 46.4 | 49.3 | 69 |
| 85+ | 4.0 | 30.0 | 66.0 | 50 |
| Total | (10.8) | (40.6) | (48.6) | 212 |
| Sex ${ }^{-4}$ |  |  |  |  |
| Males | 18.7 | 41.3 | 40.0 | 75 |
| Females | 6.6 | 40.1 | 53.3 | 137 |
| Total | (10.8) | (40.6) | (48.6) | 212 |
| b | Mental Health Rating (Informant Rated) |  |  |  |
|  | ExcellentGood | Mild- <br> Moderate Impairment | Severe-Total <br> Impairment | N |
| Age ${ }^{\text {c** }}$ |  |  |  |  |
| 65-74 | 6.1 | 71.2 | 22.7 | 66 |
| 75-84 | 2.0 | 50.0 | 48.0 | 50 |
| $85+$ | 6.8 | 34.1 | 59.1 | 44 |
| Total | (5.0) | (54.4) | (40.6) | 160 |
| Sex ${ }^{* \prime}$ |  |  |  |  |
| Males | 7.8 | 52.9 | 39.2 | 51 |
| Females | 3.7 | 55.0 | 41.3 | 109 |
| Total | (5.0) | (54.4) | (40.6) | 160 |

* $\mathrm{X} 2=13.570 \mathrm{P}=0.00880(\mathrm{P}<0.05)$
** $\mathrm{X} 2=8.315 \quad \mathrm{P}=0.01565(\mathrm{P}<0.05)$
*** No Significant Relationships
perhaps slightly forcefully too, or had chosen to remain single. Therefore, very few actually had satisfactory intimate relationships. Lifelong achievements had also been hindered by several external factors such as the wars, and consequent poverty. Table 16 shows the enjoyment of life among the elderly by sex, self and informant rated.

Among the self-reported, a significant difference between the sexes and perceived availability of help was seen. Males enjoyed life and found it more exciting than females. However, this was not particularly true when asked of the informant. Although the pattern was the same, there was no significant difference. The reason why females enjoyed life less could mainly be due to them having led dependent lives and not having achieved their lifetime goals. Also, this line of thinking may have led to a cycle of self pity which with increasing age and increasing morbidity levels, worsened. (Schaefer and Lamm, 1992).

Part (a) shows the self rated age and sex relationships where we find highly significant evidence that, in general, mental health declines with increasing age. The differences between males and females were also significant, with more males on the excellent-good end and more females on the severe-total impairment end. The elemental reasons for this difference can be related to the differences in life exposures and experiences positively inclined toward the males of this particular generation along with those cited previously for intellectual capacity, psychiatric symptoms, and enjoyment of life .

Last, but not least, the physiological declinations occurring with age, hit women harder than men, and since physiological health and mental health may catalyze one another, the fact that women were mentally less apt than men can be rationalized. Part (b) of table 21 shows the informants' ratings of mental health, where no significant relationships were observed between the variable and age/sex.

## Case Study

Mrs. Mary never lived by herself. She grew up in an orphanage with other girls like her. Later, she married Mr. S. and lived with him until his death, seven years ago. They never had children, but loved and respected one another incredibly. She could not imagine life without him - it was not only devastating but also not manageable either. Her grief and despondency culminated in a stroke, which crystallized her by enfeebling and crippling her legs, rendering them useless. She decided to move to the nursing home; she gave them her "momoired" jewelry and her savings in return for shelter, food, and some medical care.
"You know, I was an orphan, when I got married. My husband was very good. We used to go to the movies together all the time, so everyone nicknamed us "Romeo and Juliet". Later, I used to go to his shop and help him in the afternoons everything was so fine, so wonderful - [she starts crying in despair, like every other day of her life in the nursing home] I could never imagine myself in this situation, alone, in a nursing home".

Apparently, Mary used to be relatively overweight, however, at the age of 87 , she is a combination of skin and bones. Someone cut her hair in the nursing home (since it is easier for the workers to clean and maintain elderly with short hair rather than elderly with long hair), and the "look" she now has is very unrefined. She has bits and pieces of rags around her bed, so, if there is a visitor, she hastily ties one of the shreds around her head.

Her day begins by merely waking up in anticipation of breakfast to arrive. This wait is ordinarily a lengthy duration because one of her "roommates" constantly has a direly melancholic look on her face complaining of unbearable pain

is too tired to continue the interview. One or two more questions are answered, but promptly stopped by crying and feelings of intense and abstruse self-pity. Her intellectual capacity settled in the severe impact category, along with psychiatric symptoms and overall mental health. She was completely helpless at this point in her life, like many of the other old women. She was destitute, although when her husband was alive, they had been well to do. To eat alone was the only ADL she could perform. When asked if she can take care of her own appearance, like combing her hair, she quickly dallies her hands on her head demonstrating that she certainly can! Like most other women from her cohort, she had been completely dependent on the male figure in her life. In "those days", there was nothing wrong with that, on the contrary, what she had done (become dependent on her husband) was the plausible and "right thing" to do.

## Conclusions and Recommendations

all over her body. Six years ago Mrs. Mary used to sympathize with her roommate, now, it has become a predictable episode; when she complains, Mary only looks back with a blank face, somewhat sympathetic eyes and turns away. After breakfast, she waits for lunch except on Thursdays of course, when the nurse and other workers put her on a wheelchair and off she goes to become a cleaner, nicer-smelling person. At Easter, the nurse comes into their room with a pair of tweezers; "I'm going to make all of you very pretty today, you might have visitors at Easter" and starts pulling out the craggy, whitish hairs around the chins. of these old women. This act by the nurse pleased them. Righteously, they all wanted to look beautiful.

She has a couple of teeth left in her mouth, using them with some difficulty during eating hours. Her incontinence was very troubling at the beginning, but now, she has become accustomed to the special "undergarments" they make her wear. She knows she will never be able to walk again, and that her heydays are completely over. Pictures of Christ and the Holy Mother are stuck on the headpiece of her bed, but she does not have prayer books like all the others. In fact, she did not know how to read and write or even speak the Armenian language; at the orphanage, she had only been taught French and Arabic; she only learned how to speak Armenian in the nursing home. Now, there was a challenge! Learning her native language at 81 years of age. How did she learn to speak? Initially, it was not a completely new language, everyone around her communicated in Armenian. Although she had not spoken Armenian, she did understand it. Here, in the nursing home, she was obliged to use it to make herself understood. This was a great achievement for her, an environment that taught her something. With a wave of the hand and a wearied look in her disparate and asymmetrical eyes, she signifies that she

Discrimination against age is a particularly important issue, since regardless of sex, race, religion and health conditions. everyone is subject to it in due time. The aged are not only discriminated against, but due to their vulnerability, they can do little to change their situation alone. The deterioration of their physical and mental health, and the dissolution of their socioeconomic resources, leave them helpless. In fact, many of them, in anticipation of death, lose hope and interest in their own well being (Schulz and Heckhausen, 1996).

Among the recommendations to improve the condition of the elderly population, one could propose:

1. Asking medical practitioners to provide improvement in function rather than "cure" for disability, which is often the most appropriate goal of geriatric assessment - aimed at addressing a broad spectrum of problems including medical, cognitive, social, economic, etc.
2. Eliminating, through education, the stereotypic perception of the senior years as being accompanied by loss of physical attractiveness, vitality, and health - because such negative images have hampered the development of several activities for elder individuals. This would also help to strengthen family bonds and create values on attitudes towards the aged.
3. Stimulating further research in the field, in the region, for providing better environmental conditions with the elderly in mind.
4. Revising the income tax provisions to support the aged and create a system of old age pension in Lebanon.
5. Training of domestic health care providers specifically for the elderly in order to minimize the movement from home to nursing home.
6. Developing plans to introduce ways of enabling the elderly among professionals, experts, technicians, and others, to remain
productive and active in society, keeping in mind that the employment of the elderly is mainly pertinent to the "aged poor", rather than the "aged efficient".
7. Having different retirement ages for different categories of workers.
8. A key solution to the problems of aging is economic security. Those elderly who do not have families to look after them should be provided for by social services programs, governmental and public pension systems collaborating mutually. For those of whom family is present, this collaboration will include family support.
9. With the ever-increasing number of elderly persons, health care will have to be directed toward emphasis on geriatric medicine.
10. Developing volunteer and non-governmental organizations, to visit the elderly in nursing homes on a weekly basis, celebrating special holidays together.
11. Encouraging research concerning the differentials of the higher levels of morbidity among female elderly and the higher levels of mortality among male elderly.
12. The inevitable growth of the elderly population will surely necessitate the construction of more nursing homes in the country. Therefore, clear guidelines should be drawn with respect to the environmental conditions of these new nursing homes where not only the necessary physical conditions (such as the heating and bathing facilities) are well met, but also the intellectual ones, such as rooming elderly with similar socioeconomic and educational backgrounds together or in close proximity. The latter could reduce conflict among the


Picture Credit: Choghik Boulghourjian
elderly and be a better aid for socialization and hence more satisfaction.

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[^0]:    * No Significant Relationship.

