CHAPTER 7

CHARACTERISTICS OF THE POPULATION

7.1. Study Population and Response Rates

This longitudinal study of 5,492 Mexican elderly people, representative of those living in Mexico City and covered by the IMSS, was developed from October 1996 to September 1999. The distribution of subjects sampled from the twelve FMUs weighted and non-weighted is shown in Table 7.1. The weighted percentage of subjects in each FMU is similar to that given by the information system of IMSS.

Table 7.1
Distribution of subjects by Family Medicine Unit

Family Medicine Unit	*Non-weighted*		*Weighted*	
	n	*%*	*n*	*%*
6	493	9.0	28841	4.9
7	266	4.8	95095	16.1
12	122	2.2	35368	6.0
13	641	11.7	44998	7.6
22	566	10.3	44884	7.6
29	524	9.5	37466	6.3
33	385	7.0	65065	11.0
35	484	8.8	51594	8.7
41	527	9.6	70565	11.9
42	398	7.2	21213	3.6
45	484	8.8	33348	5.6
94	602	11.0	62608	10.6
Total	5492	100.0	591045	100.0

The average number of interviews per person was 3.7, with 84% of the population being interviewed four times (see Table 7.2). Less than 0.2% of sampled subjects had died before the first interview was due to be performed.

Table 7.2
Interviews per subject during the follow-up period

Number of Interviews	*n*	*%*
1	244	4.4
2	374	6.8
3	239	4.4
4	4635	84.4
Total	5492	100.0

Table 7.3 presents the number of subjects not interviewed because they were not located or had died between visits. This shows that nearly 90% completed both the second and third interviews and 91% for the fourth.

Table 7.3
Number of subjects completing interviews at each stage

Stage	*Completed interview*	*%*
1	5492	100.0
2	4879	88.8
3	4874	88.7
4	5004	91.1

90% of the subjects were interviewed at the first visit. Less than 1% required more than three visits in all the fourth interviews. The final non-response rate was 7.6%, mainly due to change of address (66%) or refusal (30%) (Table 7.4).

Table 7.4
Cause of loss to follow-up of subjects

Cause	*Non-response*	*%*	*Adjusted %*
Death	14	0.3	3.4
Change of address	276	5.0	66.3
Rejected interview	126	2.3	30.3
Total lost cases	416	7.6	100.0
Final group after the follow-up	5076	92.4	—
Total	5492	100.0	—

On average each person was followed-up over 405 days, with the minimum period being 60 days for those who died before the first interview (as per selection criteria) and the maximum being 651 days. 25% or more of the subjects were followed-up for a year and 75% or more were followed for at least 477 days (See Table 7.5).

Table 7.5
Follow-up periods

Statistics	*Follow-up period (days)*
Mean	405
Median	421
Minimum	60
Maximum	651
Percentile 25	365
Percentile 50	421
Percentile 75	477

Elderly subjects answered by themselves in 87% of the first interviews but this percentage fell to about 70% for the second and third, with proxy respondents accounting for most of the remainder (See Table 7.6).

Table 7.6
Persons who answered during the interviews

Persons who	*First*		*Second*		*Third*		*Fourth*	
Answered	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*
Subject	4783	87.1	3624	74.2	3406	69.9	3819	76.3
Proxy	471	8.6	1159	23.8	1381	28.3	984	19.7
Both of them	238	4.3	96	2.0	92	1.9	200	4.0
Subtotal	5492	100.0	4879	100.0	4875	100.0	5004	100.0
Missing	—	—	613	—	618	—	489	—
Total	5492	100.0	5492	—	5492	—	5492	—

7.2. DEMOGRAPHIC CHARACTERISTICS

Age and sex

The proportion aged 60-64 years in this study was higher than the figure officially reported by IMSS but lower than that for the general population in 1995. The opposite phenomenon was observed in the oldest groups. The rest of the distribution is similar (See Table 7.7).

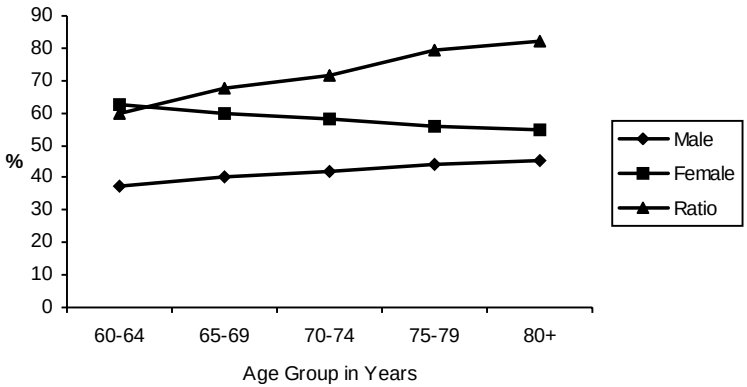
Table 7.7
Distribution of subjects by age (%)

Years	*Study*	*D.F.IMSS*	*D.F. General*[1]
60-64	31.4	27.7	32.7
65-69	26.5	24.1	24.3
70-74	19.9	19.8	18.4
75-79	12.1	12.4	11.0
80-84	5.7	7.9	7.2
85 or over	4.4	8.1	6.4
Total	100.0	100.0	100.0

[1] Conteo Nacional de Población 1995. INEGI. México

Almost 60% of the elderly were females with the male/female ratio[a] rising from 60 males per each 100 females in the 60-64 years old group, to reach 88 per 100 in the 85 years old or over. The proportion of females was always higher but decreased with age (Figure 7.1).

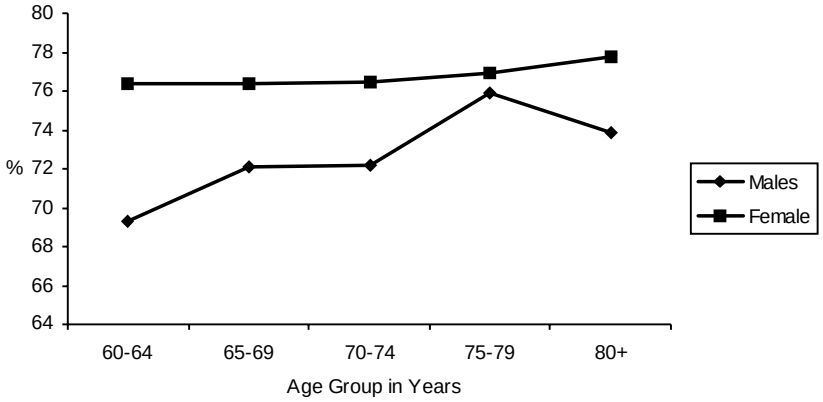
Figure 7.1
Proportion of elderly subjects by age and sex and male/female ratio



Education

77% of subjects had received formal education although a higher percentage reported that they knew how to read and write. 81% had 6 years or less of formal education and 5% with graduate or more studies.

Figure 7.2
Distribution of subjects with 6 years or less of formal education by age and sex



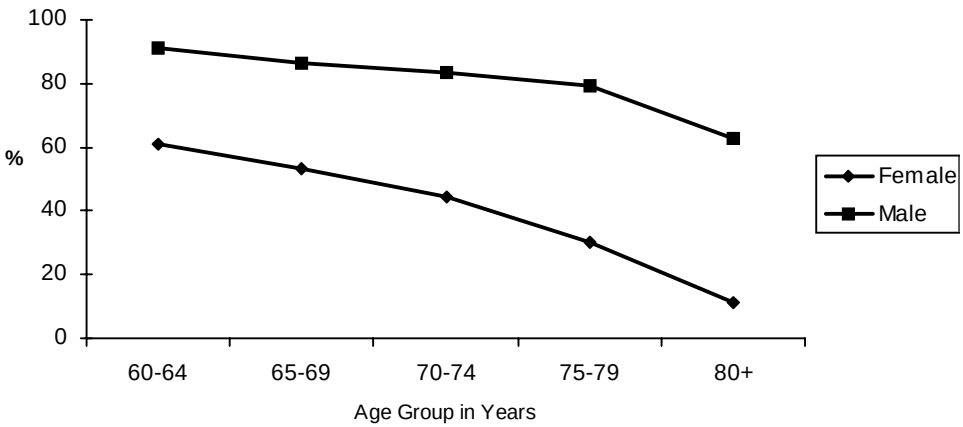
[a] Male/female ratio = (number of males/number of females)* 100

The proportion of people with less than 6 years of formal education increased with age, especially among women. (See Figure 7.2).

Marital status

Nearly two thirds (62%) of subjects had a partner (61% were married and over 1% cohabiting) while the remaining 38% were single, separated, divorced, or widowed (er). The proportion of females with a partner (married or cohabiting) was always significantly lower than that in males and decreased with age (See Figure 7.3).

Figure 7.3
Percentage of subjects with a living partner by age and sex



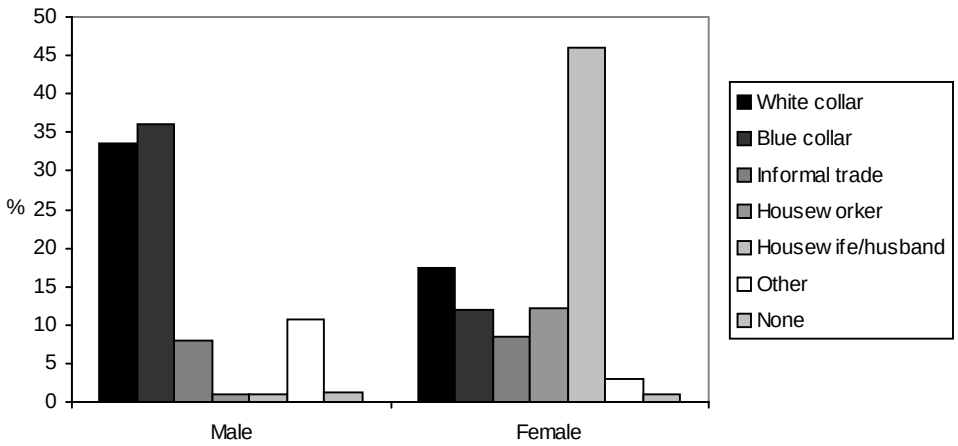
Paid occupation

Almost 71% of the elderly reported that they had held a paid occupation in the past. There were no differences in the proportion with a previous paid occupation by age but the relative frequency for women was lower than in men (52 vs. 98%). The most frequent occupation for women was housewife and the proportion of people in informal trade was the same for both sexes (See Figure 7.4). Nearly 15% of the elderly subjects reported that they currently were in a paid occupation and there were differences by age. The proportion of pensioners increased until 79 years old and then decreased slightly

and remained stable. The proportion of people who did not report any occupation increased gradually with age.

The proportion of women in a currently paid occupation was 7% and 26% for men most of whom were pensioners while only 9% for women were.

Figure 7.4
Distribution of subjects by occupation and sex



Place of birth

Nearly 39% of elderly subjects were born in the Federal District and 61% in other states in Mexico. Only 0.4% of the subjects were born overseas. Other places were State of Mexico (10%), Michoacán (9%), Guanajuato (9%), and Hidalgo (7%). The proportion of people born in the Federal District decreased significantly in older age groups.

The proportion of people who had attended and attained higher levels of formal education was higher among those who had been born in the Federal District (Table 7.8). Although a high proportion of people were born in Mexico City, only 35% of the subjects reported that they had always lived in Mexico City. In addition, 34% said they have lived there for more than 50 years and only 2% reported 20 years or less.

Table 7.8
Distribution of elderly subjects by place of birth

States	*%*
Federal District	38.5
México	10.4
Michoacán	9.1
Guanajuato	8.8
Hidalgo	6.6
Puebla	4.2
Jalisco	3.8
Oaxaca	3.1
Others	15.4
Total	100.0

7.3. INCOME

The great majority (89%) of subjects reported that they had a personal income or other transfers, while the remaining 11% were dependent on other resources and were without sufficient cash available for their own needs. The proportion of those reporting an income was lower among women, those living in a nuclear or extended family or without a partner, and for those who did not receive any formal education ($p<0.05$). Almost 60% of the population reported a personal income. The proportion was also significantly ($p<0.05$) higher in males (almost twofold that for females); those who were not living in nuclear or extended families; those who attended formal education; and those without a partner (Table 7.9).

Over a half of the elderly subjects (57%) reported money transfers from relatives, mainly from their children, but in some cases from other relatives. The proportion of women reporting transfers was significantly higher ($p<0.05$) than that for men. Table 7.9 shows that there were no significant differences in the proportion of people receiving transfers by any of the other variables reported. However, the proportion of those receiving transfers was lower among those living alone or in a non-familial household, and among those who did not have a formal education.

Table 7.9
Percentage of subjects reporting income
(personal, transfers and total)
by some important characteristics

Variable	*Personal income*	*Transfers*	*Total Income*
Gender			
Female	43.7	65.7	85.5
Male	83.2	45.0	94.0
Type of family		*	
Lone household	76.9	40.6	93.0
Nuclear	58.5	55.9	87.9
Multiple (friends)	62.6	59.0	92.9
In Non-familiar household	81.5	44.8	91.1
Extended	57.0	61.7	88.9
Mix (brothers or sisters)	68.3	58.1	92.4
Age of the elderly	*	*	*
60-64 years	55.9	57.9	88.3
65-69 years	60.0	59.4	90.1
70-74 years	60.1	56.8	88.3
75-79 years	62.7	54.2	91.0
80-84 years	64.5	55.4	87.8
85-89 years	60.2	52.4	86.0
Attended formal education		*	
Yes	63.0	55.8	89.8
No	48.3	62.2	86.1
Partner		*	
Yes	55.6	56.4	87.1
No	66.6	58.7	92.2

* No significant association between those variables

Table 7.10 shows the average income (personal, transfers and total) among those who reported sources of income. People who did not report were excluded from this section. The average total monthly income was $1382 Mexican Pesos (MX$)[b] (equivalent to $USD 175 and £103[c]). The average personal monthly income reported was MX$1203 ($USD 153 and £90). Lower personal incomes were observed among the oldest, women, those living alone, in non-familiar households and in extended families, those who did not attend formal education, and those who did not have a partner ($p<0.05$).

Table 7.10
Average income (personal, transfers and total) by different important characteristics in Mexican pesos

Variable	*Personal income*	*Transfers*	*Total Income*
Gender			
Female	933.94	959.03	1212.94
Male	1410.00	748.85	1606.51
Type of family			
Lone household	1063.22	636.99	1156.86
Nuclear	1306.59	942.16	1468.45
Multiple (friends)	1479.59	1013.05	1641.45
Non-familiar household	1075.57	961.12	1435.09
Extended	1092.23	862.48	1298.69
Mix (brothers or sisters)	1123.29	788.03	1326.41
Age of the elderly			
60-64 years	1370.48	971.39	1504.45
65-69 years	1266.50	877.42	1420.95
70-74 years	1105.71	837.67	1291.07
75-79 years	1010.93	736.49	1168.15
80-84 years	991.16	930.15	1294.88
85-89 years	937.19	1016.30	1396.37
Attended formal education			
Yes	1292.47	958.91	1503.29
No	799.30	682.04	941.09
Partner			
Yes	1379.90	900.33	1464.28
No	958.31	878.40	1252.61
Total	1203.54	891.89	1382.02

[b] Mexican Pesos in 1996.

[c] Exchange rate on 31st. December 1996 (13.39 Mexican Pesos per one Sterling Pound and 7.88 Mexican Pesos per USA Dollar). Source: Classic 164 Currency Converter. http://www.oanda.com/converter/classic (21/10/99).

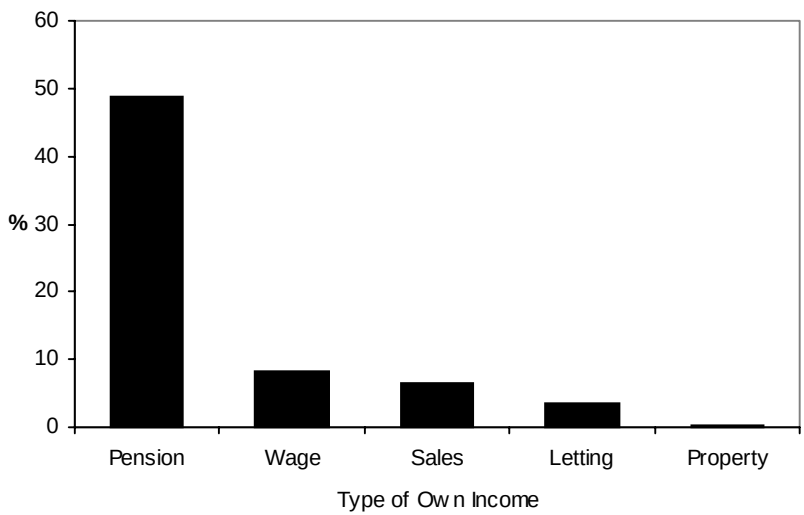
The average monthly income from transfers was MX$900 ($USD114 and £67). This type of income was higher among women and those with a partner or who had attended formal education. Transfers decreased with age until the 75-79 years age group and then appeared to increase again in later life. Those living alone or in extended or mix families reported the lowest income from transfers.

49% of the elderly were receiving a pension, with the highest proportion observed among men, those living alone, those who had attended formal education and who did not have a partner. 7% reported an income from an informal trade, being higher among men and those with a partner and it decreased with age ($p<0.05$).

There were no differences by education or type of family. Only 8% of the population was receiving a salary. The proportion was significantly lower among women, the oldest, those without a partner and those who did not attend formal education. There were no significant differences by type of family, education and age of the subjects (See Figure 7.5).

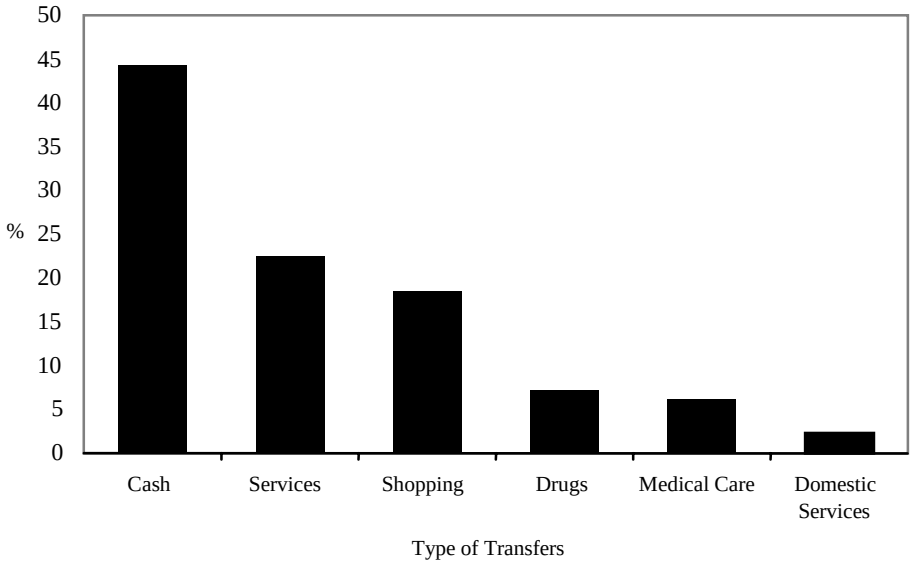
On average 44% of elderly subjects reported transfers in cash from different relatives or friends. Women received such transfers (54%) more frequently than men. (31%).

Figure 7.5
Percentage of subjects by type of own income



Those living in extended, nuclear and multiple families reported the highest proportion of people receiving transfers in cash. The proportion of subjects receiving this type of transfer decreased with age and was higher among those who did not attended formal education (See Figure 7.6).

Figure 7.6
Percentage of subjects by type of transfers



7.4. FAMILY STATUS

The interviewed elderly were living mainly in nuclear families (46%), however, 39% lived in extended families and only 7% were living alone. The proportion of women living by themselves or in extended families was higher than for men ($p<0.05$) (Figure 7.7). The recognised head of the family was an elderly member in almost 60% of those interviewed and in 23% it was the spouse. Other members of the family were reported in lower proportions.

Over 93% of the elderly who were interviewed considered that they participated in family decisions. This proportion was lower among the oldest groups. In general, women reported a higher level of participation in decisions related to housing and preparation of food while men reported a higher proportion in education of grandchildren, and free-time leisure activities (Figure 7.8). Participation of the elderly in family decisions was higher between those with a partner and higher levels of education.

Figure 7.7
Family status of subjects by sex

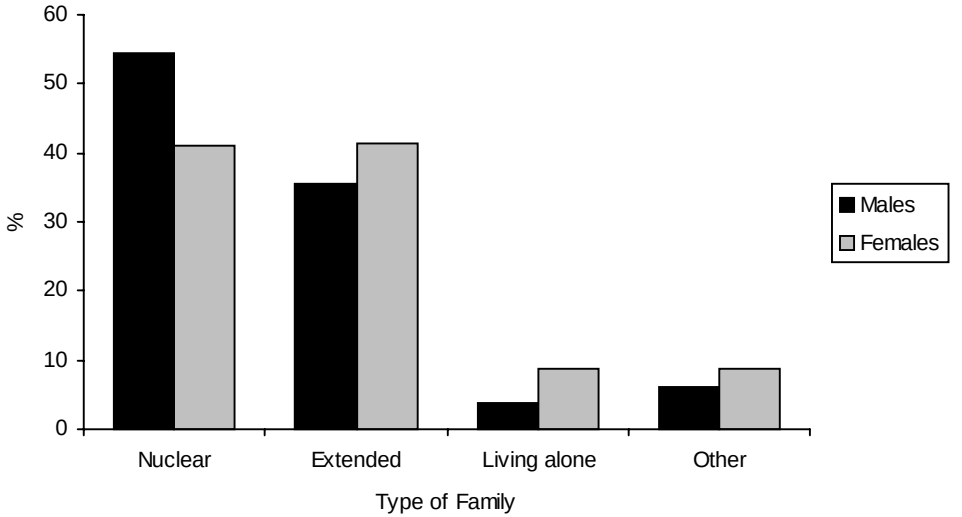
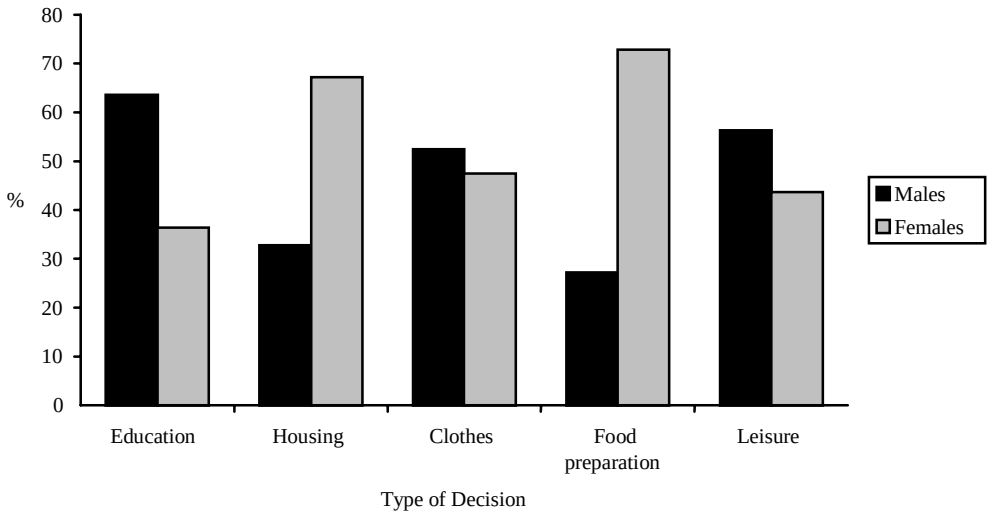


Figure 7.8
Distribution of subjects by sex and type of decision in which they participated



7.5. TYPE OF INSURANCE

Almost 36% of the elderly in the sample were pensioners, 28% were spouses, 32% beneficiary parents and less than 5% had subscribed through an other type of insurance. The percentage of pensioners increased with age but there were no differences by sex or level of education. The percentage of beneficiary parents increased also with age, particularly among women and those with the lower level of education.

9% of the subjects also reported they had other types of insurance. As in IMSS, other institutions cover elderly people directly or through their spouse or children. The distribution of those having other insurance options was as follows: 76% (9% of the total population) were also covered by the ISSSTE (for civil servants); 15% reported a private insurance (only 1% of the total population of elderly subjects); 5% reported services from Army Forces (0.4% of the total); and finally 1% are also covered by Pemex or Navy Forces (0.1% of the total elderly subjects interviewed).

7.6. SUMMARY

1. In this study, the study participants were found to be representative of the elderly population living in the DF. Most subjects were interviewed four times and the non-response rate was maintained at a lower level than expected when the project was planned. However, the participation of proxy respondents was higher than had been expected.

2. The low proportion for the oldest old age group in this sample had been observed before and could be explained by the lack of updating in the information hold by IMSS.

3. As in IMSS reports, women predominated in the age groups, but the male/female ratio increased with age, which means that women survived longer than men even though they seemed to suffer worst health conditions and die with a higher frequency.

4. The percentage of all elderly people who had attended formal education was low and even lower in higher age groups, especially in women. This is explained by the greater opportunity for education in younger cohorts.

5. The higher proportion of men in past and current paid occupations was expected and reflects the lower opportunities for women in the past and their worse economic conditions, since many did not receive a pension.

6. Having a source of income was observed more frequently in men; however, it was mainly from their own resources. When women reported an income it was coming mainly from transfers.

7. The average monthly income, either from personal sources or transfers was equivalent to two minimum wages in Mexico. This suggests that many of the elderly are close to the limits of poverty in Mexico.

8. Most of the participants were born in the DF or had been living there for more than 50 years. The highest migration rate was observed from the States of Mexico, Michoacán and Guanajuato.

9. Only one third of the study population were pensioners and the rest were beneficiaries from other insurers.

10. The proportion of elderly with another type of public insurance was low. It was even lower for those reporting private insurance.

11. Nearly a half of the population was living in a nuclear family and more than one third in extended families. In more than 80% of the cases one elderly subject was considered to be the head of the family and in more than 90% they participated in family decisions.