Chapter 10
Aging and Family Support in the State of Mexico

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10.1   Introduction

The demographic transition is characterized by a decline in mortality followed by a decline in fertility, a process that results in changes in the age structure of the population and increases in life expectancy. One of these transformations, to which this chapter pays special attention, is the increasing number of persons aged 60 years and over. In Europe this transition has been largely completed and took place gradually, whereas in Latin America, the transition is still occurring and at a much faster pace.

In 2012 it has been estimated that the number of elderly people in the world was 809 million people, or 11% of the world population; it is expected to 22% by around 2050. Meanwhile, in 2010 the proportion for Latin-American region was 9.9%, and in 2050 it is expected to be 25.8% (CEPAL 2011).

Mexico has a similar scenario. The demographic transition there has been so accelerated that since 1930 the adult population has been increasing constantly. In 2010 the population of 60 years and over comprised 9% of the total population, and it is projected for 2050 to be over 21% (see Table 10.1).

The State of Mexico is the most populous subarea of the country and also has a significant proportion of the population aged 60 years and over. In 1990 the older population represented 4.6% of the total population of this city; by 2000 it had increased to 5.7%; and by 2010 it reached 7.6%. Recent estimates of the National Population Council (CONAPO) project that by 2030 it will be nearly three million seniors representing 14.7% of the total population in the area (see Table 10.2).

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Table 10.1 Population aged 60 and over, Mexico, 2010–2050

Population	2010[a]		2020[b]		2030[b]		2050[b]	
	Population	%	Population	%	Population	%	Population	%
Total	*112,336,538*	*100*	*127,091,642*	*100*	*137,481,336*	*100*	*150,837,517*	*100*
Men	54,855,231	48.8	61,898,147	48.7	66,697,101	48.5	72,888,372	48.3
Women	57,481,307	51.2	65,193,495	51.3	70,784,235	51.5	77,949,144	51.7
Total 60 years and over	*10,055,379*	*9.0*	*14,425,879*	*11.4*	*20,365,839*	*14.8*	*32,427,197*	*21.5*
Men	4,679,538	8.5	6,612,679	10.7	9,200,953	13.8	14,244,660	19.5
Women	5,375,841	9.4	7,813,200	12.0	11,164,886	15.8	18,182,537	23.3

Source: Based on data from [a]INEGI and CONAPO [b](Population projections updated at November 29, 2012)

Table 10.2 Population aged 60 and over, State of Mexico, 2010–2030

Population	2010[a]		2020[b]		2030[b]	
	Population	%	Population	%	Population	%
Total	*15,175,862*	*100*	*18,075,065*	*100*	*20,167,433*	*100*
Men	7,396,986	48.7	8,834,764	48.9	9,860,611	48.9
Women	7,778,876	51.3	9,240,300	51.1	10,306,822	51.1
Total 60 years and over	*1,137,647*	*7.5*	*1,917,767*	*10.6*	*2,972,420*	*14.7*
Men	521,277	7.0	878,243	9.9	1,345,188	13.6
Women	616,370	7.9	1,039,524	11.2	1,627,232	15.8

Source: Based on data from [a]INEGI and CONAPO [b](Population projections updated at November 29, 2012)

Fig. 10.1 Population pyramids, Mexico, 2015, 2025, and 2050. (Source: Data and population projections from CONAPO (CONAPO 2012))

As it is shown in Fig. 10.1 the evolution of the structure of population by age and sex of Mexico will change significantly between 2015 and 2050. There will be a decrease in the proportion of the population of younger age, a significant growth of the elderly, and a maintenance of the population who, according to their age, can become economically active.
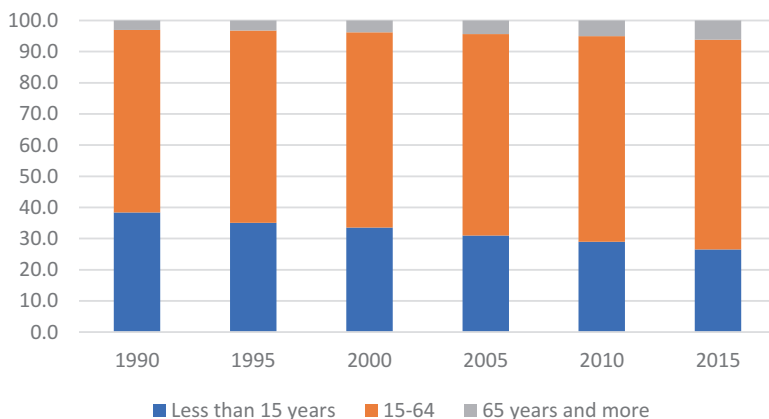
Fig. 10.2 Population by large age groups (%), Mexico 1990–2015. (Source: Population census, counts and Intercensal survey (INEGI 2016a, b))

The situation of having a large number of people of age 60 years and older, with projected increases of them in the years ahead, is a challenge we have to face as a society. We need to ask about the risks that this increase of population implies; these include a decline in their abilities, their health condition, their financial support and the social support they will need. This situation will likely need an intervention to maintain the quality of life for this population.

We note that the most relevant changes in the structure of the population of Mexico between now and the year of 2015 are the decreasing proportion of population under 15 years and the increasing proportion of those 65 years and over. Figure 10.2 illustrates the need to rethink care arrangements for the elderly and the way the future social security system needs restructuring.

The role that families of older people play in maintaining their welfare is clear and traditional; aging usually refers to the deterioration of abilities and health, as well as income, making the elderly dependent socially and economically on their families. The support that social networks, family or friends, can provide is reflected in the co-residence and monetary or affective transfers. However, the increasing incorporation of women into the labor market, the decline in the number of children that women have, and the state's inability to meet the needs of this population, all could well lead to a weakening of the support networks of the elderly (Arriagada 2005).

The aim of this chapter is to describe the current status of the population 60 years and over in the State of Mexico, with special attention given to families. A number of variables and indicators will be examined to provide a broad description of the conditions of the elderly. We will provide information on the dependency ratio, household type of residence, number of household members, and marital status disaggregated by sex. All the data are from the 2010 Mexican Census of Population and Housing.

10.2   Background

Traditionally, children in Mexico, as in most countries, are expected to help their elderly parents when they can no longer carry out their daily activities independently. With inadequate financial support and medical services, there is an increased pressure on families to ensure the welfare of a growing number of adults.

There is a rich literature that indicates that it is usually the need for support of and care for older adults that triggers intervention by children (Herrera and Fernández 2013). Older adults tend to receive various forms of support, but having a partner or children is the most important factor that determines the actual delivery of this support in times of need.

Most believe that the more valuable resources for coping with unfavorable circumstances requiring assistance are work, family, and personal savings. Also, most Mexican elderly know that support from the State is usually inadequate as a mechanism of protection. One can argue that the welfare of the elderly depends on their relationships with the different institutional spheres of the market, the state, the family and community organizations. Owing to the failure of the first two spheres in Mexico, the importance of the family to meet the needs of the elderly is unquestionable.

We usually think of the population aged 60 years and over as a group that has ceased to be productive, or at least has greatly reduced the amount of their labor force participation. Once this is accompanied by some deterioration in their physical abilities and, in many cases, a lack of income, the elderly become dependent on others. It is at this point that the family becomes a source of support, given the absence of adequate public health services and sufficient retirement systems in Mexico (Hakkert and Guzmán 2004).

As we have noted, the fertility declines lead to impacts on family size along with decreased mortality, and both result in an increase of people's life expectancy and in a greater number of persons 60 years of age and older. This decrease in births also results in the stress on the now smaller number of family members on whom the responsibility falls for caring for the elderly.

In Latin America less than one-half of the urban population 60 years and over is a beneficiary of social security, versus only 38% in rural areas. And this inadequate coverage is accompanied by a steady decline in the number of family members. This raises the question of who will be responsible for providing support and care for older adults in times of illness or disability. Currently, in Latin America and the Caribbean, only 8.4% of the population is over 60 years. Despite this relatively low percentage of the elderly population, the proportion of urban households with at least one older adult varies from 21% in Mexico to 49% in Uruguay. At the same time, the percentages of elderly living alone are high.

According to various studies, in Mexico assistance to the older population is presented through different ways, some of which appear as informal support networks where the closest family and friends are often the handiest. Co-residence

of the elderly with their families is often a strategy used, particularly when income is low or need special care is required.

As mentioned above, in Mexico, the support of older adults usually occurs via co-residence. If we add to this fact the inability of public institutions to absorb the needs of this growing population, we see that this cohabitation is employed as an informal support network. This usually goes in both directions: from the children to their parents and from the parents to their children. According to data from the 2010 Mexican census, 14.3% of households had at least one adult aged 65 years and over.

According to data from the Health and Aging Survey (SABE project)[1] about one of five older adults in Latin America changed residential settlements during the 5 years prior to the survey. Part of the results of this analysis of aged people is that they are more likely to live alone, but as their age increases the ratio declines. This has to do with the fact that an increase in age may also be an increase in physical limitations or dependency.

It is also the case that there is a link between the phase of the life cycle and changes in living arrangements for the elderly. In Mexico the percentage of co-residence of older adults with family is 19% (SABE project).

In Mexico demographic research on aging has examined the impact of these arrangements on the welfare of households and their members. It has been found that this phenomenon is not static but depends largely on the life cycle of older people, and the needs of the residents and the lifecycle of the children in household (Solis 2001). That is why the type of household in which the elderly reside depends on a shared decision between them and their family. There are also studies claiming that in the future the proportion of households with only one parent in the household should increase due to the reduction in the size of families (Ham et al. 2003). In Mexico there is an excess of single-person female households, and these are mainly older women. It is also noted that when older adults are financially able and/or own their property, they prefer to live independently. It is only when they need assistance do they choose co-residence.

Meanwhile, Montes de Oca (1999) has argued that the way in which the older population resides is important for the forms of social support required. These supports can be familial or institutional, and may be material, intangible or by services. Different forms are used to assist the individual who requires service, at different stages of their life course.

This family support provided can be from family members, who may or may not be residing with the elderly, as well as from neighbors or friends. In this sense Montes de Oca (1999) has distinguished support by two types: intra-household and extra-domestic. By definition, the elderly who live alone, i.e., in one-person house-holds, do not have intra-domestic support. If they have any support (monetary, emotional, information or service) it must come from other homes. In general, social support refers to the individual belonging to a social network in which the bonds

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[1] Project for population 60 years and over in seven cities of Latin America and the Caribbean.

may be reciprocal. The effectiveness of this support will depend on the situation that is granted, the individual and their particular needs (Ham 2010).

The family is the place of affection, of care, and of altruistic solidarity, but also the place of submission, subordination and conflict (Castro 2013). It is constantly changing, in the same way that their networks, their organization and their functions change, and it requires a tremendous capacity of adaptation for the preservation of solidarity among its members, which will be reflected in supporting older adults.

Hence, we consider it important to analyze not only the types of households in which older adults reside, but also the family relationships within them and the existence of living with relatives or others (Huenchuan y Guzmán 2007). However, one also needs to take into account that belonging to a family does not necessarily guarantee that the elderly will receive support from household members. In Mexico it has been found that family support is becoming more important to the extent that people have low income and/or do not have institutional support that ensures social security.

Financial support usually comes from the closer family, specially their children, when an elderly person does not have a job or pension income. This support is based on a cultural and historical tradition that allocates to the family this role. However, the support is subject to the economic possibilities of the family as well as to the quality of the relationship between them.

10.3   Data and Results

In the analyses we undertake in this chapter, we use microdata samples from the Population and Housing Census of 2010; these data provides information of the resident population in the country, and its main demographic and socioeconomic characteristics.

As we have shown earlier in Tables 10.1 and 10.2, the percentage of population aged 60 and over in 2000, for the country as a whole is about 9.0%, and in the State of Mexico it is about 8%; these percentages are expected to increase in the coming years (Fig. 10.1).

A common measure used to determine the degree of dependence of the elderly population to the young population is the aging index, defined as the ratio of the number of persons 60 years and over per 100 persons under 15 years of age. The ratio for Mexico in 2010 was 21.4, meaning that there were 21.4 old persons per 100 persons aged youth (CONAPO 2011). We show in Table 10.3 that for the State of Mexico the ratio is 26.1, and it is greater for women than for men.

Table 10.3 Ageing index. State of Mexico

Male	Female	Total
23.6	28.7	26.1

Source: Prepared with the 2010 Census microdata (INEGI)

Table 10.4 Dependency
ratio of people aged 60 and
over by sex. State of Mexico,
2010

Sex	Ratio
Male	11.8
Female	12.8
Total	12.3

Source: Prepared with the 2010
Census microdata (INEGI)

Table 10.5 Number of members in the household aged 60 years and over by sex, State of Mexico, 2010

Members	Male	Female	Total
1	11.8	32.8	44.6
2	20.8	9.7	30.5
3	6.5	6.8	13.3
4	2.9	2.9	5.8
5 and over	2.8	2.9	5.7

Source: Prepared with the 2010 Census microdata (INEGI)

Another measure of dependency is the total dependency ratio, i.e., the number of youth (persons aged 0–14) plus the number of elders (persons of age 60 and over), per 100 persons in the producing ages of 15–59. Note that the numerator includes both children and the elderly. This ratio may be disaggregated into a youth dependency ratio and an aged dependency ratio. We show in Table 10.4 that in 2010 the aged dependency ratio for the State of Mexico is 12.3. The ratio for all of Mexico is 9.1. Thus the dependence of elderly people requiring support and care is greater in the State of Mexico than nationwide.

We next look at household size. The average number of members per household, according to data from the 2010 Census, is 3.9 members per household for Mexico, and 4.1 members in the State of Mexico. In the Table 10.5 we show the percentage of households with elderly according to the size of the household. We show that elderly men tend to live in households with two members, while women tend to live in households with one member. We show in the table shows that the majority of old adults live alone, or with another member, probably the spouse. These results are somewhat unexpected given our discussions of elderly co-residing with other relatives.

The type of household in which older people live is an important matter to consider because it provides information about the potential support that the elderly might need or be provided. For example, 32.8% of women aged 60 and older do not have any family member living with them. The data in Table 10.6 shed some light on the living arrangements of the elderly in the State of Mexico.

The results for the State of Mexico show that the highest proportion of seniors living in family households live in extended households, representing 9.8%, followed in importance by those in nuclear households (households where the couple is living together). The data further indicate that elderly men are mostly in households where their spouses are present; this is less likely for elderly women, probably due to higher male mortality.

Table 10.6 Population 60 years and over by type of household in which they reside, by sex, State of Mexico, 2010 (%)

Sex\type of household	Nuclear	Expanded	Compound	Living alone	Co-resident	Total
Male	29.7	11.8	0.4	3.0	0.1	45.7
Female	36.1	13.5	0.3	3.4	0.1	54.3
Total	65.8	25.3	0.7	6.4	0.2	100

Source: Prepared with the 2010 Census microdata (INEGI)

Table 10.7 Percentage of population 60 years and over as head of household by sex: State of Mexico, 2010

Sex	Percentage
Male	12.7
Female	6.9
Total	19.5

Source: Prepared with the 2010 Census microdata (INEGI)

We show in Table 10.7 that the number of persons aged 60 and over make up 19.5% of all heads of household in the state of Mexico. Elderly men are almost twice as likely to be heads of household than are elderly women.

Finally, an indicator of the degree of social interaction, as well as the existence of support networks, of people 60 years and over, is their marital status. We aggregate the married elderly—civil, religious and both, or in consensual union—as one category, and group those who are divorced, separated or widowed in a second category as ever in a union.

We show in Fig. 10.3 that male elderly are most likely to live in a union, with far fewer formerly in a union, or being single. In contrast, slightly more elder females have been in a union in the past than are currently in a union, with even fewer elderly women being single than are elderly men.

We also show in Fig. 10.3 that elderly women are more likely than their male counterparts to not have a spouse (mostly due to its death) and, thus, represent a potential need for social support more so than male elderly.

We show in Table 10.8 that almost all elderly women in the State of Mexico have at least one child, and that the average number of surviving children per woman is 5.2 children. Under the assumption that there is an implied obligation to help parents when they need help, the elderly population might have support from their children when needed.

10.4   Discussion

We have shown in this chapter that the elderly in the State of Mexico represent a substantial, and rapidly growing, proportion of the total population. In the coming years, the elderly will comprise between 20% and 25% of the total population, growing much larger by 2050. The aging of the population in the State of Mexico,

Source: Prepared with the 2010 Census microdata (INEGI).

Fig. 10.3 Population 60 years and over by marital status and sex (%). State of Mexico, 2010. (Source: Prepared with the 2010 Census microdata (INEGI))

Table 10.8 Percentage of children for women aged 60 years and over, women by urban/rural location: State of Mexico, 2010

Number of children	Rural	Urban	Total
0	0.7	0.4	0.4
1	4.7	7.1	6.8
2	5.8	11.6	10.9
3	7.8	15	14.1
4	9.5	14.3	13.7
5	10.6	13.8	13.4
6	12.5	11.4	11.5
7	12.8	8.9	9.4
8	11.8	6.6	7.2
9	9.8	4.7	5.3
10 y más	14.1	6.1	7.1
Total	100	99.9	99.9

Source: Prepared with the 2010 Census micro data (INEGI 2010)

as in all of Mexico, will increase the burden that young people have with respect to the elderly. This needs to be taken into account when planning policies and programs. This is one important reason why we need to know the basic characteristics of the elderly to help understand the role of both family and State to maintain the quality of life of the aged.

Our results suggest that much of the elderly population in Mexico has potential support from their families, given a fairly high number of surviving children for this

generation. However, to determine whether this support is given in real terms may only be assessed through a specific survey on the subject or by undertaking more detailed quantitative and qualitative work that would allow us to analyze this issue in greater depth than is possible with census data.

References

Arriagada, I. (2005). ¿Existen políticas innovadoras hacia las familias latinoamericanas? *Papeles de Población, 43*(1), 9–27.

Castro, T. (2013). Informe sobre el homenaje a Julieta Quilodrán. *Estudios Demográficos y Urbanos, 28*(2(83)), 497–524.

CEPAL. (2011). *Observatorio Demográfico No. 12*. Envejecimiento poblacional, CELADE, Octubre, 190 pp.

CONAPO. (2011). *La situación demográfica de México 2011*. México: Consejo Nacional de Población.

CONAPO. (2012). Proyecciones de población. Obtained in September, 27, 2013. http://www.conapo.gob.mx

Hakkert, R., & Guzmán, J. M. (2004). Envejecimiento demográfico y arreglos familiares de vida en América latina. In M. Ariza & O. de Oliveira (Eds.), *Imágenes de la familia en el cambio de siglo* (pp. 479–517). Mexico City: Instituto de Investigaciones Sociales, Universidad Nacional Autónoma de México.

Ham, R. (2010). Envejecimiento demográfico. In B. García & M. Ordorica (Eds.), *Los grandes problemas de México. Vol I: Población* (pp. 53–78). Mexico City: El Colegio de México.

Ham, R., et al. (2003). Redes de apoyo y arreglos de domicilio de las personas en edades avanzadas en la Ciudad de México. *Notas de Población, 77*, 71–102.

Herrera, M. S., & Fernández, M. B. (2013). ¿Está disminuyendo la solidaridad intergeneracional en América Latina? Un estudio de las relaciones intergeneracionales de los hijos con los adultos mayores. In V. M. de Oca (Ed.), *Envejecimiento en América Latina y el Caribe. Enfoques en investigación y docencia de la Red Latinoamericana de Investigación en Envejecimiento* (pp. 271–300). Mexico City: Instituto de Investigaciones Sociales, UNAM.

Huenchuan, S., & Guzmán, J. M. (2007). Familias y políticas públicas en América Latina: una historia de desencuentros. In I. Arriagada (Ed.), *Familias y políticas públicas en Amércia Latina. Una historia de desencuentros* (pp. 273–293). Santiago: CEPAL/UNFPA.

INEGI. (2010). Base de datos del Censo de Población y Vivienda 2010, México

INEGI. (2016a). *Página web consultada en noviembre de 2016*. https://www.inegi.org.mx/app/tabulados/pxweb/inicio.html?rxid=d518b312-a32e-4d23-a8dd-08a64c187a6c&db=Poblacion&px=poblacion_01

INEGI. (2016b). *Página web consultada en septiembre de 2016*. https://www.inegi.org.mx/programas/intercensal/2015/default.html#Tabulado

Montes de Oca, V. (1999). *Relaciones familiares y redes sociales in Envejecimiento demográfico de México: retos y perspectivas. Por una sociedad para todas las edades* (pp. 289–326). CONAPO: Mexico City.

Solis, P. (2001). La población en edades avanzadas. In J. Gómez de León & C. Rabell (Eds.), *La Población de México. Tendencias y perspectivas sociodemográficas hacia el siglo XXI* (pp. 835–869). Consejo Nacional de Población, Fondo de Cultura Económica: Mexico City.