ECAS 2013

June 27-29

African Dynamics in a Multipolar World

ISCTE - Lisbon University Institut

ECAS 2013

5th European Conference on African Studies *African Dynamics in a Multipolar World* ©2014 Centro de Estudos Internacionais do Instituto Universitário de Lisboa (ISCTE-IUL) ISBN: 978-989-732-364-5

OLD AGE AND INEQUALITIES IN EGYPT. THE ROLE OF INTERGENERATIONAL RELATIONSHIPS AND TRANSFERS WITHIN THE FAMILY

Aurora Angeli University of Bologna (Italy) aurora.angeli@unibo.it

Annalisa Donno University of Bologna (Italy) annalisa.donno2@unibo.it

Abstract

The paper aims at analysing the condition of the elderly in Egypt, a country where ageing is a rising trend. Our focus is on the role intergenerational ties and transfers within the family have in alleviating poverty situations of aged people. We analyse old people living arrangements in order to underline the spread of vulnerability among them.

In a social and economic context where old people are vulnerable to poverty, we intend to investigate the importance of economic and non-economic flows towards the elderly. We use individual data from Egypt Labour Market Survey 1998 and 2006 that inform about demographic characteristics of individuals, households, housing conditions and non-work sources of income.

Keywords: Egypt, ageing, living arrangements, old age inequalities, intergenerational relationships, transfers within the family.

1. Introduction

Africa, like other parts of the world, is undergoing rapid demographic changes, and although the population is largely youthful, the proportion of older persons has increased tremendously over the past few decades (Apt, 2000; Maharaj, 2012).

The African population in 2010 includes 36 million elderly people aged 65 years and over, that is 3.6% of the total population, up from 3.3% in 2000. In 1980, 3.1% of the population was aged 65 and above, and there has been a steady increase during the last forty years. Africa's population is ageing simultaneously with an unprecedented growth of the youth population and its related challenges. The ageing population in Africa faces a different set of challenges. Ageing is highly linked with long-term physical and mental disability and a number of long-term chronic conditions and it is likely to increase personal care needs. However, unlike many developed countries, African nations are in general not well prepared to deal with the rise in the number of older people. The main matters are healthcare provisions and pensions. Yet, most African countries face weak health care systems to adequately address these emerging health problems among the elderly. As well, much of the region has to deal with a lack of viable social safety nets and with an increasing prevalence of poverty, particularly among elderly headed households. Moreover, population ageing in Africa is expected to accelerate between 2010 and 2030, as more people reach age 65. The elderly could account for 4.5% of the continent's population by 2030, and for almost 10% by 2050. In some countries, the proportion of older people will almost match that of industrialized countries by 2030 and 2050 (Nabalamba & Chikoko, 2011). Overall, it has been the middle-income countries which have witnessed the greatest increase in population ageing in Africa. Egypt is included among African countries that present the most conspicuous ageing process, with Mauritius, Tunisia, Morocco, Algeria, South Africa.

Egypt is still a young country, even if its population is ageing and it is going to experience rapid and dramatic demographic changes. Egypt's population remarkably increased over the previous decades, even if the country has been characterized by a demographic growth rate smaller in comparison to the other countries belonging to North Africa, the Arabic peninsula and the Middle-East region (Tabutin & Schoumaker, 2005). In the second part of the XX century, the Egyptian population sharply rose from 35,3 million in 1970 to about 59,3 million in 1996. According to the 2006 census data the population, including those living abroad, is estimated to have reached 76,5 million at a growth rate of 37% over the 1996 figure; 2012 census data show that Egypt's population has reached 92 million, living on just 5.3% of the country's area (Egypt State Information Service, 2013).

Recent decades have been characterized by remarkable changes both in fertility and in surviving. The average number of children per woman (TFR) declined from 6.6 in 1990 to around 2.8 nowadays. The country also registered, after 1980, important improvements in life expectancy levels both for men and women, with the pace of improvement more significant in poorer regions (Galal, 2003). Differences between the Governorates and urban/rural areas persist, mostly in fertility.

Improvements in life expectancy and the decline in fertility gave rise to the subsequent process of demographic ageing. It is therefore possible to expect that during the next years the ageing processes will produce important changes in the age structure of the population.

2. Aim of the paper

The aim of the paper is to verify if the first signs of the population ageing processes in Egypt can be also recognized at the households level. We intend to study changes in living

arrangements by focusing on households which include aged individuals. Furthermore we will analyse the role the various types of support flows within families have in reducing vulnerability among old Egyptians.

Although there are commonly used definitions of old age, there is no general agreement on the age at which a person becomes old (World Health Organization [WHO], 2013).

In this analysis we assume the age 65 to mark the threshold of old age, as in other analysis on ageing processes in Africa (Nabalamba & Chikoko, 2011).

Individual data used for the analysis derive from 1998 Egypt Labour Market Survey (ELMS1998) and 2006 Egypt Labour Market Panel Survey (ELMPS2006) that inform about demographic characteristics of all household members, household assets and housing conditions, non work-related sources of income, remittances sent home by migrants etc. In order to assess the situations of older people and the way family supports their needs, we consider the characteristics of living arrangements both in 1998 and 2006 (parent-child coresidence, living alone or other situations) and their changes between the two surveys.

For 2006 we also focus on socio-economic conditions of the elderly who live alone or in the couple only, in order to verify the spread of intergenerational support by a gender and geographical perspective.

3. Socio-demographic aspects of ageing in Egypt

Changes in population structure

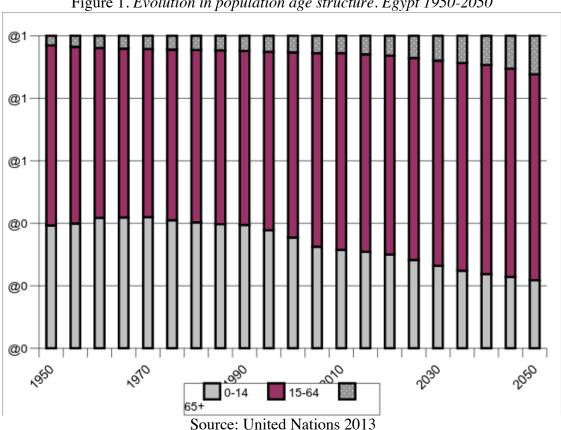
The ageing process contributes to a change in the country's age group composition. The country presents the indicators of demographic ageing proposed in the literature such as the decrease of the time each country employs for doubling its number of people aged 65 years and

over, or the fact that the share of people aged 60 and over overcome the 10% of the whole population (Pison, 2009; United Nations, 2013; Thumerelle, 2000).

United Nations population estimates and projections (2013) show that in 2010 the share of the population aged less than 15 years is still 31.5%, about 24,6 million. In 2030 young Egyptian people will amount to about 27 million (26.4% of the total population). The number of those 65 years and over will increase from 4,3 million in 2010 to 8,1 million in 2030 (5.5% and 7.9% of the total population respectively in 2010 and 2030).

The older population itself is ageing. The number of older people, likely to be dependent, is growing.

Figure 1 shows that in the near future the ageing processes of the demographic structure will involve all the population age groups.



Due to the persistence of disparities within and across Governorates in demographic trends, the age structure presents geographical differences. Rural population will age faster. Among the related factors we can recall the rural-urban labour migration of young adults and adolescents, followed by the return to the rural areas after retirement.

Ageing consequences

Demographic ageing is thus a recent phenomenon in Egypt. Together with socioeconomic conditions and health disparities in later life, it is still understudied in the country as in other Middle East and North Africa countries (Yount & Agree, 2005).

The rising number of older people is generally associated with an increase in age-related functional limitations, that is the ability to perform basic activities of daily living (Boggatz *et al.*, 2010). For this reason socio-economic measures for the creation of networks for the later life assistance should be implemented by public and private institutions. As population ageing increases, issues surrounding support and care of older persons should receive more attention. The steady increase of population in older age groups, in absolute term as well as with respect to the working-age population (Figure 1), has important implications for the country on the possibility to implement formal and informal assistance measures in favour of elderly people.

During the last decades geographic and social concentration of poverty may have even increased, as in general in the MENA countries: the main correlates of poverty are both rural location and education level and quality (Angeli, 2009).

International organizations evaluate that Egypt does not have an economic structure able to

answer the requirements of an ageing society and moreover Egypt's social protection systems

have to face the lack of resources (UNFPA, 2010; Loewe, 2000).

4. Data sources

Individual data derive from the "Egypt Labor Market Survey" of 1998 (ELMS1998) and the "Egypt Labor Market Panel Survey" of 2006 (ELMPS2006), directed by the *Economic Research Forum* (ERF) and *CAPMAS*. The surveys are nationally representative household samples (Barsoum, 2007) and are composed of a household-level questionnaire and an individual-level questionnaire. The household is there defined as a constituted unit, that can be also composed of an individual habitually living alone.

The ELMS1998 includes 4,816 households, while the total number of households reached in 2006 is 8,349. The ELMPS2006 sample consists of three types of households: 3.684 households visited in 1998, households that split from the 1998 sample as sons and daughters (among others) form their own households, plus a refresher sample of 2,500 households.

The surveys collects data on: housing conditions (comfort level, exploitation), households durable goods and assets, demographic characteristics of all household members (gender, age, age at marriage, marital status, relation to the head of the household), education, work characteristics, migration, non-wage income sources and money transfers (pensions, remittances, support from ONG or religious Organizations).

5. The ageing process in Egypt

Demographic characteristics of the elderly

The elderly included in the two surveys are 1,177 in 1998 and 1,785 in 2006, and respectively represent 4.8% and 4.9% of the total population included in the surveys (Table 1). The slight increase in the proportion of the population aged 65 and over between the two surveys does not clearly reveal the magnitude of the change. Estimates of the absolute numbers of the

elderly in the population, better highlight the size of the change: that is, 2,892,408 individuals aged 65 and over in 1998 and 3,422,059 in 2006. Data from Labour Market surveys confirm the progressive demographic ageing of the older population itself between 1998 and 2006. The country has been characterized, during the reference period, by a growth in the percentage of the elderly population in the older groups (70 and over), while the proportion of the young elderly (60-69) decreases. The same trends are occurring in most countries, regardless of their geographic location or developmental stage: the 80 or over age group is growing faster than any younger segment of the older population (United Nations, 2002).

Table 1. Percentages of old Egyptians aged 65 years and over on the total population, by sex and residence. 1998 and 2006

	1998			2006			
	65-79	80+	65+	65-79	80+	65+	
Sex							
Male	4.14	0.58	4.72	4.02	0.58	4.60	
Female	4.32	0.52	4.84	4.46	0.66	5.13	
Male and female	4.23	0.55	4.78	4.24	0.62	4.87	
Residence							
Urban	4.72	0.51	5.23	5.12	0.69	5.81	
Rural	3.88	0.58	4.45	3.61	0.57	4.17	
Number of observations	1,043	134	1,177	1,553	232	1,785	

Source: own elaborations from ELMS1998 and ELMPS2006. Weighted data.

Along with the ageing process women are expected to represent an increasing share of the older population, as in most countries. As far as Egypt is concerned, the population aged 80 and older represents 11.4% of the elderly population in 1998, but it accounts for 12.8% in 2006. Data

highlight that in Egypt, as in most developed and developing countries, the percentage of women among the elderly increases (from 50.3% in 1998 to 52.8% in 2006), naturally due to the longer lifespan of women.

Urban areas show a higher share of the elderly in their total population than their rural counterparts. Percentages are conditioned by the different distribution of the two genders in the urban and rural areas as well as by their marital status. Geographical differences also emerge with respect to poverty, that is predominantly rural. Almost 56% of the Egyptian population live in rural areas, but 78% of poor people and 80% of the poorest households live in the countryside (Awad & Zohry, 2005; UNPD, 2008).

Ageing and living arrangements

Modifications in the demographic structure of the population recently caused important changes both in living arrangements of the elderly and in cross-generational ties.

Ageing has deep consequences on society and entails many changes in the family life, in the intergenerational relationships as well as in the social security system. It is therefore fundamental to know the socio-demographic features and living arrangements of the elderly for understanding if new forms of social vulnerability of aged people are arising in the country.

Trends in living arrangements and in the role the elderly play within their households are important for their potential explanatory role in the study of socio-economic fragility and inequalities. As stated by United Nations (2005) the analyses of late-life living arrangement of older persons usually emphasize the benefits and costs associated with different household compositions, pointing out the interplay of constraints and preferences. Older people have historically been cared for within the traditional extended-family structure in Egypt. As said

before, the country – like many developing regions – is experiencing a phase of rapid demographic and socio-economic transformations that imply substantial changes to the traditional joint-family structure.

The extended family system is changing toward a more nuclear family structure, thus contributing in increasing the vulnerability of older people in Egypt. In such a context, it emerges the need for special attention on the welfare provisions for aged people by public, private and informal sectors, as well as the need to make health services readily available for older persons (Ajiboye, Olurode & Atere 2012; Velkoff, 2001).

Information on age, sex, marital status and on the relation to the head of the household for each household component allow us to understand the structure of the household in which the elderly live and the status the elderly have in their household.

About one household in five of Egyptian households includes at least one component aged 65 years and more both in 1998 and 2006. Geographic differences emerge: the share of households including an aged individual growths in the urban Governorates (Cairo, Alexandria, Port-Said, Suez).

An important feature is represented by the percentage of household heads among elderly men and women. As in most African countries, because of the social influence of the patriarch, the role of head of the household is in most cases assigned to the oldest men living in the household, even when he is not the supplier of the household economic resources or the individual with the higher level of authority (Locoh, 2007; Pilon & Vignikin, 1996). Among men aged 65 to 79 years, more than 9 on 10 are head of the household both in 1998 and 2006. Among women in the same age group (65-79 years), the observed percentage is lower, but the

condition of head of the household becomes more and more frequent and increases by 33% between 1998 and 2006 (Table 2).

Table 2. Individuals aged 65 years and over by relation to the household head, gender and age. Percentages

	Male		Female	
65-79 years old	1998	2006	1998	2006
Household head (including those living alone)	91.9	93.9	29.4	39.1
Household head's spouse	0.2	0.4	23.4	23.6
Parent (living with descendants)	7.3	5.0	37.8	29.7
Other relations (living with relatives)	0.5	0.7	6.2	6.2
Servant, other	-	-	3.2	1.4
Total	100	100	100	100
Number of observations	526	746	517	807
Over 79 years old				
Household head (including those living alone)	79.3	84.9	25.2	35.6
Household head's spouse	-	0.4	-	1.3
Parent (living with descendants)	16.7	13.7	56.7	55.6
Other relations (living with relatives)	4.0	1.0	10.2	4.3
Servant, other	-	-	7.9	3.2
Total	100	100	100	100
Number of observations	67	108	67	124

Source: own elaborations from ELMS1998 and ELMPS2006. Weighted data.

Detailed survey data show that in Egyptian households, also widowed women living in the family of a child sometimes assume the role of head.

The analysis of Egyptian households features by gender shows that considerable differences exist among men and women. The proportion of women heads of household rises, above all as a consequence of the growth of the number and the relative weight of women living alone. In 2006 almost one in five women aged 65 years and over lives alone (Table 3). The characteristics of living arrangements and their changes between 1998 and 2006 allow us to deeper assess the situations of older people and thus the way family support their needs. Our attention is focused on parent-child coresidence, on the spread of living alone and on other family patterns. It emerges that the share of aged people living with relatives decreases, also when analysing the oldest ages.

Table 3. Living arrangements of the elderly aged 65 and over by gender

	1998			2006		
	Male	Female	Total	Male	Female	Total
Living alone	5.0	14.8	9.9	5.7	19.4	13.0
Living with spouse only	18.5	9.0	13.7	24.4	10.2	16.9
Living with child, child-in-law, or grandchild	75.0	64.8	69.8	68.7	62.3	65.4
Living with other relatives	1.3	7.5	4.5	0.9	6.4	3.8
Living with unrelated people only°	0.2	3.9	2.1	0.2	1.7	1.0
Total	100	100	100	100	100	100
Number of observations	593	584	1,177	854	931	1,785

°Those living with a servant are included.

Source: own elaborations from ELMS1998 and ELMPS2006. Weighted data.

Data confirm a widespread tendency toward the choice of independent living as well as strong gender differences. Living alone or in couple is a trend in line with a general propensity toward

independent living, already common in more developed countries and also increasing in some developing countries (United Nations, 2005). However, living alone or in elder couples not always could be the result of an independent choice. For some of the aged Egyptians it could be a forced condition, induced by the increasing urbanization and job migration of younger relatives.

A great influence of the type of residence on female living arrangements clearly emerges, with a more widespread presence of older women living alone in the urban context (Angeli & Alberani, 2011). We estimate that more than 350,000 old Egyptian women aged 65 or more live alone in 2006; nearly 69% of them are urban.

As in most countries, men living their old age with their spouse are more numerous than women. Widowhood is more frequent among women, often younger than their husbands and characterised by a higher life expectancy (Tabutin & Schoumaker, 2005). The result is that old Egyptian men (head of the households or not) more often than women live in couple with child and grandchild or with their spouse only. Men in couple often live in complex households, where they assume the role of family head even if surveys' data outline that they are not the providers of the household economic resources. The existence of multigenerational households, which probably involves financial transfers and where multiple types of solidarity can be set on, represents significant "latent networks" that can be activated to provide support and wellbeing for family members (Bengtson, 2001; Isengard & Szydlik, 2012). The poor Egyptian elderly who live outside the extended family are considered a vulnerable group (Sims, 2003).

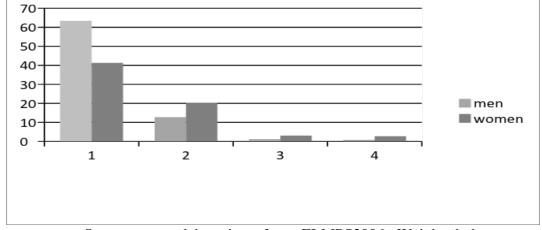
6. Public and private economic support to the elderly

As said in the previous sections, Egypt socio-economic system is not fully able to face issues linked to the population ageing process and to support and protect aged individuals from falling in poverty. The weakness of the public welfare system makes most of the older population dependent, either partially or exclusively, on the support mainly granted by the family. The exchange between public and private economic support of the elderly becomes a key theme when living arrangements change toward a more nuclear structure. Private transfer behaviour might react to public support alternatives to improve the economic well-being of the aged.

Figure 2 shows that in 2006 about 63% of men aged 65 years and more receive a retirement or social pension, while for women in the same age-class the share reaches 41%. Men, because of their higher labour force participation rates, are more likely to receive retirement pensions with respect to women.

Figure 2. People 65 years and over receiving public support, by sex and public support typology.

Percentages on the total of each sex.



Source: own elaborations from ELMPS2006. Weighted data.

Old women tend to be more dependent upon public welfare resources. They are more likely to be beneficiary of Sadat pension and/or Mubarak pension and support from the Ministry of Social Affairs, as well as to receive help from religious and non-governmental organizations than men. Geographic differences clearly emerge when taking into account information about the type of residence (Figure 3). About 68% of the urban elderly aged 65 years and over receive a retirement pension, while for rural elderly the share only reaches about 35%. Aged individuals living in rural households more frequently receive retirement pensions, Sadat pension, Mubarak pension, support from Ministry of Social Affairs. Assistance from private associations does not differ between urban and rural residence.

The dramatic changes occurred in the living patterns of older Egyptians with the rise of solitary living, or living in households with only elderly members, imply that a growing number of elderly persons must provide themselves, and are more likely to live in poor conditions.

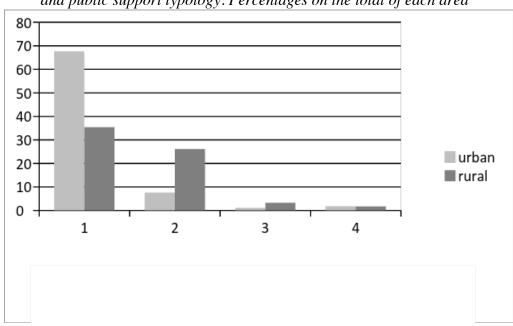


Figure 3. People 65 years and over receiving public support, by residence and public support typology. Percentages on the total of each area

Source: own elaborations from ELMPS2006. Weighted data.

Relatives in many cases represent the main care givers for older, even if not co-residing. Relatives' involvement in multiple support schemes depends on the fact that relations within families are not limited by their residential arrangements (Bengston, 2001). So, in spite of the family breaks-up due to migration, old people living alone can receive remittances from relatives living abroad. In 2006 about 12% of Egyptian households with at least an old individual (65 and more years old) receive support from relatives living outside of the household, both in Egypt and abroad.

7. Living alone or with spouse only: intergenerational solidarity. 2006 survey

As expected, data from 2006 Survey underline that aged individuals living alone are more likely to receive support from household's members than elderly living with other individuals in other kinds of households. Coresidence, that is living in multi-generational households, guarantees to old individuals internal care and support of various type, as assistance during illness, financial and emotional support (Antoine & Golaz, 2010; United Nations, 2005).

To better understand the role of intergenerational ties and solidarity within Egyptians families as care and economic protection sources, we direct our attention on solitary living elderly and on individuals living with spouse only in elder couples (in which at least one spouse is aged). Our focus is on information about benefits the household has received during to the 12 months before the interview from relatives living far from the household. The survey includes data on the following types of aid: child support, remittances, general assistance or alimony. Among individuals living alone women are more likely than men to receive support from relatives (26.7% versus 10.7%). With respect to residence, individual living alone in the rural context are more likely to receive support from relatives (28.3% versus 21.4%). The same

Old age and inequalities in Egypt. The role of intergenerational relationships and transfers within the family differences are registered among the elderly living with the spouse only, even if differences are less evident.

The spread of private forms of support for the elderly provided by relatives significantly varies with individual, demographic and socio-economic characteristics. We aim at examining the effect of some selected socio-demographic variables on the likelihood of receiving assistance from relatives, a proxy of intergenerational solidarity, for older people living alone and for elderly couples.

We specify two models, the first for the elderly living alone, the second for married elder couples – including at least a component aged 65 and over – who reside alone. The dependent variable is the likelihood of receiving support from relatives (money or goods from members living far from the household during the past 12 months before the survey). Covariates are represented by age (65-79 years and 80 years and more), sex, residence (urban, rural), the existence of other type of support to the elderly or to the couple (public support, aids for religious organisations). In the second model the covariate sex was not included as we consider the couple as observation unit, and the heads of these households are almost all men.

The logistic regression results displayed in Table 4 confirm that elderly living alone in the urban context are less likely to receive private support from family members than those living in rural areas.

Table 4. Logistic regression results. Odds-ratios of receiving support from relatives. Individuals living alone or in elder couples.2006

		Mode	11	Model 2		
		LIVING ALONE		ELDERLY COUPI		
Variable name	Ref.	Odds Ratio	P-value	Odds Ratio	P-value	
Age	65-79	0.879	0.7756	0.572	0.2952	
Public support	No	0.894	0.7505	0.300	0.0348	
Residence	rural	0.344	<.0001	0.121	<.0001	
Sex	female	0.187	0.0019			

Source: own elaborations on ELMPS2006.

ELMPS2006 detailed data outline indeed that elderly living in rural zones have to cope with difficult housing conditions and socio-economic isolation, that require support provided by relatives. Moreover, the probability of receiving help is significantly determined by sex: old women living alone are more likely than men to be assisted within the family.

Results from the second model show that for the aged couples the most important covariates explaining the probability of receiving support from relatives are both residence and the availability of public support. The odds of receiving assistance from relatives is extremely lower for urban couples with respect to the rural ones. Moreover, elderly couple that benefit from public forms of support are less likely to receive private support: this result confirms the hypothesis that family is the most important care and protection sources for aged people when public welfare system is not able to answer their needs.

8. Conclusions

Results from ELMS1998 and ELMPS2006 confirm that changes in the demographic structure of the Egyptian population had an effect on living arrangements behaviour and

Old age and inequalities in Egypt. The role of intergenerational relationships and transfers within the family intergenerational relationships. The percentages of households including at least a 65 or more years old component are quite equal in 1998 and 2006 and stay around 20% in both surveys, but first results show that in the period under analysis important modifications occurred.

The most common living arrangement for older men and women remains living with their adult children (and/or grandchildren). Coresidence – a multigenerational living arrangement – is commonly viewed as one type of intergenerational transfer, where the needs of older persons can be met. In spite of this continuity in late-life living arrangements, data highlight that between 1998 and 2006 parent-child coresidence has become less widely practiced in Egypt. The most important emerging trend is the considerable increase of the proportions of the elderly living alone. Aged women (as in general in developed countries and in other developing countries) are much more likely than men to live alone. Older men are likely to live in family situations, typically with a spouse or in multigenerational living arrangements.

The rise in female-headed households, represents an issue of particular interest: due to structural constraints as well as to the lack of access to available welfare transfer systems, it implies that households headed by aged women are more likely to be poor than the male-headed ones (Hassanin, 1999; Loewe, 2000; Galal, 2003; Handoussa, 2005). Poverty, as in other developed and developing countries, is more often found among unmarried, divorced, widowed and abandoned women than in any other social groups. The trend has obvious social and economic consequences and significant implications for the stability of the assistance arrangements, in particular when households are headed by old women.

Elderly living alone represent a group of natural social and policy concern. The proportion increased in the majority of the countries over time in all regions of the world, suggesting the existence of a global trend of this kind of living arrangement among the older

population (United Nations, 2005). Those living alone are more likely to need assistance in the case of illness or disability, are at greater risk of social isolation and, in particular in countries – as Egypt – with weak systems of social security, are markedly likely to be poor. First results obtained analysing data on public and private supports to the elderly suggest a good deal of reciprocity in exchanges within families and generations. For example, elders living alone or with spouse only are likely to receive monetary or alimony transfers from relatives (mostly children) living abroad. Out-migration emerges then as an important resource for elderly living in precarious conditions.

References

- Ajiboye, O.E., Olurode, L., & Atere, A.A. (2012). Migration, Remittance and Quality of Life of Older Persons in Nigeria. British Journal of Humanities and Social Sciences, 3 (2), pp. 100-123.
- Angeli, A. (2009). Economic and non-economic poverty in the MENA region, Economic Research Forum (http://www.erf.org.eg).
- Angeli, A., & Alberani, C. (2011). Les premiers signaux du vieillissement de la population en Égypte. Conditions de vie des personnes âgées et relations intergénérationnelles. In Molmy, W., Sajoux, M., & Nowik, L. (éd.) Actes du colloque international: Vieillissement de la population dans les pays du sud. Famille, conditions de vie, solidarités publiques et privées...État des lieux et perspectives(pp. 227-242). Paris: CEPED.
- Antoine, Ph., & Golaz, V. (2010). Vieillir au Sud: une grande variété de situations, Autrepart, 53, pp. 3-15.
- Apt N.A. (2000), Rapid urbanization and living arrangements of older persons in Africa. Accessed September 2013, in https://www.un.org/esa/.
- Awad A. and Zohry A. 2005. The end of Egypt population growth in the 21st century: challenges and aspirations.

Accessed April 2013, in http://www.zohry.com/pubs/alyaa.pdf.

- Barsoum, G. (2007). Egypt labor market panel survey 2006: Report on methodology and data collection. Economic Research Forum (ERF). Working Paper Series, 0704.
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational relationships in American society. Journal of Marriage and Family, 63, pp. 1-16.
- Boggatz, T., Farid, T., Mohammedin, A., Di Jkstra A., Lohrmann, C., & Dassen, T. (2010). Socio-demographic factors related to functional limitations and care dependency among older Egyptians. Journal of Advanced Nursing, 66(5), 1047-1058.
- Egypt State Information Service (2013). Population. Accessed September 12, 2013, in http://www.sis.gov.eg
- Galal, A. (2003). Social expenditure and the poor in Egypt. ECES Working Paper, 89. Accessed September 12, 2013, in http://www.eces.org.eg.
- Handoussa, H. (ed.) (2005). Egypt Human Development Report 2008. Choosing our Future: Towards a New Social Contract. United Nations Development Programme.
- Hassanin, M.M. (1999). Egypt: A Poverty Profile. National NGO Commission for Population and Development (http://www.icsw.org/).
- Isengard, B., & Szydlik, M. (2012). Living apart (or) together? Coresidence of elderly parents and their adult children in Europe. Research on Aging, 34(4), 449–474.
- Locoh, T. (2007). Genre et sociétés en Afrique: implications pour le développement. Les Cahiers de l'Ined, 160.
- Loewe, M. (2000). Social security in Egypt. An analysis and agenda for policy reform. Economic Research Forum for the Arab countries. Working Paper 2024. Accessed September 12, 2013, in http://www.erf.org.eg
- P. Maharaj (ed.) (2012), Aging and Health in Africa, International Perspectives on Aging, 4, Springer New York, pp. 11-51.
- Nabalamba, A., and Chikoko, M (2011), Aging Population Challenges in Africa, African Development Bank, Vol. 1, Issue 1. (http://www.afdb.org).
- Pilon, M., & Vignikin, K. (1996). Stratégies face à la crise et changements dans les structures familiales. In Coussy, J., & Vallin, J. (éd.) Crise et population en Afrique: crises économiques, politiques d'ajustement et dynamiques démographiques. Paris, CEPED, 471-493.

- Pison, G. (2009). Le vieillissement démographique sera plus rapide au Sud qu'au Nord. Population et Société, 457, pp. 1-4.
- Sims, D. (2003). The case of Cairo, Egypt. Understanding Slums: Case Studies for the Global Report on Human Settlements 2003 (http://www.ucl.ac.uk/)
- Tabutin, D., & Schoumaker, B. (2005). La démographie du monde arabe et du Moyen-Orient des années 1950 aux années 2000. Synthèse des changements et bilan statistique. Population, 60 (5-6), 611-724.
- Thumerelle, P.J. (2000). Vieillissement et longue vie. Espace, Populations Sociétés. Le vieillissement dans le monde, 3, pp. 363-378.
- United Nations (2002). World Population Ageing 1950-2050, United Nations New York.
- United Nations (2005). Living Arrangements of Older Persons Around the World. New York: DESA.
- UNFPA (2010), Population Ageing. EGYPT, United Nations Population Fund, (http://egypt.unfpa.org).
- United Nations (2013). World population prospects: the 2012 revision. Accessed September 11, 2013, in http://esa.un.org/wpp/unpp/panel_indicators.htm
- Velkoff, V.A. (2001). Living arrangements and well-being of older population: future research directions. In United Nations (ed.) Living Arrangements of older persons. Population bulletin of United Nations, (42/43), 376-386.
- World Health Organization (2013). Definition of an older or elderly person. Proposed Working Definition of an Older Person in Africa for the MDS Project. Accessed September 30, 2013, in WHO the World Health Organization web site http://www.who.int
- Yount, K.M., & Agree, E.M. (2005). Differences in disability among older women and men in Egypt and Tunisia. Demography, 42(1), 169-87.