Changes in life expectancy in different marital status for French elderly people: gender and generational perspectives.

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# ABSTRACT (max 300 words)

The needs of old people when dependency arises differ significantly according to whether they are married, widowed, divorced or single. Research shows among others that spouse is the main care giver and singles, mainly because they are mostly childless, are more often in institution.

During the last decades, some studies have shown that marital situations of old people have tremendously changed. For instance, whatever the age, they are less likely to become widow(er)s. Beyond this cross-sectional approach, we use on a biographical approach to better understand the needs of care (formal and informal) and their potential duration. We analyse life expectancies of marital status according to various marital biographies. For example, most of women married at 60 will face widowhood. Those born in 1900 had an expectancy of life at 60 of 25 years. They spent 11,5 with their husband and 13.6 years alone. "Marital isolation" represents the main part of their life after age 60. For those born 40 years later, the result is reverse; they will spend most of the time with their husband (16.4 years) and 14 alone. Most of the 5 years gained in life expectancy are spent with a partner (4.5 years).

The final paper will also include results for men and for oldest old.

Our main data source is vital statistics of mortality, marriage, divorce and widowhood according to sex, age and former marital status. Using these data, we built a microsimulation model to reconstitute and forecast the matrimonial histories of French men and women born between 1900 and 1950.

## **EXTENDED ABSTRACT**

The needs of old people when dependency arises differ significantly according to whether they are married (or cohabiting), widowed, divorced or single. Research shows that the spouse is the main care giver and singles, mainly because they are

mostly childless are more often in institution (Gaymu et al., 2006).

In France like in most of European countries, marital situation has tremendously changed in the last decades. With the decrease of mortality, old people are more likely to live the different stages of retirement with a partner. But the increase of the proportion of divorcees in younger cohorts may lead in the future to an increase of marital isolation especially for men (Kalogirou and Murphy, 2006). Beyond this cross-sectional approach, we consider a biographical approach to quantify the potential duration of needs of care. To do that, we analyse the changes in life expectancies of all different marital status according to various marital biographies. For example, assuming that mortality is different according to marital status (Vallin, Meslé, Valkonen, 2001), we look at the life expectancy as a couple for those married at 60 who will remain married until their death; or life expectancies as a couple and as a widow(er) for those married at 60 years old who becomes widow(er)s later on, and so on and so forth for the different existing configurations. As all the changes occurs differently (in tempo and in quantum) for men and women, we will use a gender approach.

## Data and methods

Our main data source is vital statistics of mortality, marriage, divorce and widowhood by sex, age and former marital status. Using these data, we create a microsimulation model that reconstitutes the matrimonial histories of men and women born between 1900 and 1950. For younger cohorts, we have forecasted the last part of their life with an extrapolation of the past trends. Birth cohort 1901 refers to observed data for all their life cycle while those born in 1950 are reaching retirement age, therefore their situation at age 50 is known but the changes after that age are simulated.

## **Main Results**

Here we present some results on women, but the final paper will compare both male and female situations. We will also investigate in more details the situation of the oldest old, those that are more likely to need care.

A first result is on "marital isolation" defined by not having a spouse for ever-married person. The consequences of the combination of a lower risk of widowhood and a higher risk of divorce are then investigated. Over the female cohorts, before age 60,

the decrease of the percentage of widows is compensating the increase of divorced one and "marital isolation" remains at the same level. After 60 years old, the decrease of the percentage of widows is greater than the growth of divorced, and therefore, "marital isolation" whatever the age is decreasing.

The main set of results are devoted to the duration of life spend in various marital status with a focus on marital isolation.

Women that are married at age 60 have gain 6 years of life expectancy between birth cohort 1901 and 1940; of these 6 supplementary years, 4 years will be spend in marriage; slightly less than 2 years in widowhood and 0.3 in divorce.

This result is an average and therefore hides very diverse situations; all women will not face widowhood and/or divorce from the age of 60 to their death. Some of them will remain married until the end; others will divorce, and a great part of them will face widowhood.

Let's look at these different situations one by one:

- Firstly women who will remain married. Their life expectancy grows by around 4.5 years from nearly 14 years to slightly more than 18.5 years. The growth of their life expectancy is rather low in comparison with the other situations. In fact, women who die as married, do it at a lower age, before the age range of widowhood. It is because of their death that they will not face the other event.
- The majority of the women married at 60 will know the event widowhood. Those born in 1900 had an expectancy of life at 60 of 25 years. They spent 11.5 of these 25 years with their husband and 13.6 years alone. "Marital isolation" represents the main part of their life after 60. For those born 40 years later, the result is reverse; they will spend 16.4 with their spouse and 14 years alone. The main part of the gain is then lived as a couple and life expectancy in widowhood has increased only very slightly. There is though a nearly perfect translatory movement of the ages of the beginning and the end of widowhood. Over the birth cohorts, women that become widows spend most of the retirement with their partner. This result is of course extremely

positive, as we know that living with a partner help to socialise and on the other side widowhood is a source of a greater fragility and needs of care.

• The number of the married women at 60 who will have to face a divorce after this age is pretty low even for youngest birth cohorts. Therefore, to look at the situation of the divorced, we gather people already divorced at age 60 and those who will become divorced after this age. For women, life expectancy as married remain stable around 1.3 years and life expectancy as divorced has increased by 3 years. Note also the overall increase of life expectancy for those who divorce is lower than those who remain married (2.1 vs. 3.7) due to an over-mortality of the divorced.

Table: life expectancy in different marital status

	Birth cohort							
	1901				1940			
	Married	Widowed	Divorced	Total	Married	Widowed	Divorced	Total
Women married at age 60								
Remain								
married	13.9			13.9	17.6			17.6
Become								
widow	11.5	13.6		25.1	16.4	13.9		30.3
Become								
divorced	6.8		12.9	19.7	5.5	0.8	18.5	24.8
Total	12.2	9.1	0.045	21.3	16.4	10.6	0.4	27.4
Women divorced at age 60 or become divorced after age 60								
	1.5	1.2	20.6	23.3	1.3	0.5	23.6	25.4

Note: divorce after age 60 is quite rare, the figure are hardly significant.

Lastly we investigate the changes in life expectancy at 60 for all persons with no more a spouse that is those who will be divorced or widowed between age 60 and their death. For these women, total life expectancy at 60 goes from 23.5 years to 29.2; over these supplementary 5.7 years, 1.2 years are in marital isolation and 4.5 are spent in a couple. In relative terms, the main share of these supplementary years is lived in a couple. The increase of the duration of isolation by 1.2 years is mainly

due to the increase of life expectancy as divorced, life expectancy as widow(er)s remaining around 16 years.

Whether people are optimistic or not, these results will be consider as positive or not. On an individual point of view, women will face less often widowhood and when it is the case, it is for a period of time that will not increase. But, they will face more often divorce and therefore, like single persons will spend their retirement age alone.

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