

Single motherhood and low birthweight in Spain: The role of the changing sociodemographic profile of unmarried mothers in narrowing social inequalities

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INTRODUCTION

Cohabitation, union disruption and out-of-wedlock childbearing are significantly transforming the family biographies experiences of women, men and children in many societies (Lichter, 1995; Seltzer, 2000; Bumpass and Raley 1995; Bumpass and Lu, 2000; Kiernan, 2001; Billari, 2003). Nonmarital fertility has been traditionally low in Spain, but in recent years it has undergone a considerable increase. This emerging trend has important repercussions for family dynamics, children welfare and also social inequality, since nowadays social inequality is increasingly linked to family structure (Wu and Wolfe, 2001).

The proportion of births to unmarried mothers in Spain has increased from 2% in 1975 to 28.4% in 2006, i.e. more than 1 out of 4 births occur nowadays outside marriage. Hence, nonmarital childbearing is becoming an increasingly common path to family formation (Baizán, Aassve and Billari, 2003), and Spain no longer fits the traditional family formation sequence (courtship-marriage-new household-first birth) that has long prevailed in Southern Europe (Billari *et al.*, 2003).

Along with this marked increase, there has been an important shift in the socio-demographic profile of nonmarital fertility: a growing proportion of nonmarital births are born to women older than 30, are second or third order births, are born in households where their unmarried parents live together or are legally acknowledged by non-resident fathers.

The objectives of this paper are: (a) to document the recent increase in out-of-wedlock childbearing in Spain within the context of other family related changes; (b) to describe the changing socio-demographic profile of unmarried mothers; (c) to examine perinatal health differentials between marital and nonmarital births; and (d) to explore whether the changing profile of nonmarital childbearing can contribute to diminishing perinatal health inequalities

DATA AND METHODS

Since the establishment of the national vital registration systems –and even before, in the parish registers– births within and outside marriage have been clearly differentiated, although the terms used and the legal and social consequences of this categorization have changed over time. In Spain, it is not until 1981 that the concept of *illegitimate birth* disappears. From that year on, birth statistics record births to married mothers and unmarried mothers.

In this paper, we will use several data sources. Published vital statistics since 1900 will allow us to describe long-term trends in nonmarital fertility. In order to depict the shift in

the socio-demographic profile of unmarried mothers during the past two decades, we will analyze the vital statistics birth microdata from 1980 to 2006. Although the coverage of the birth registry is virtually complete, a significant drawback of these data is that no information on mother's and father's education is collected, limiting the analysis of social inequalities in nonmarital childbearing. Furthermore, for unmarried mothers no information is collected on whether they are single, separated, divorced or widowed, or whether they are cohabiting with a partner or not. For this reason, we will turn to the *1995 Fertility and Family Survey* (Delgado and Castro Martín, 1999) and the *2006 Fertility and Values Survey* in order to explore the living arrangements of unmarried mothers at the time of giving birth.

In order to explore the health disadvantages of nonmarital births, we will focus on a dimension of perinatal health, birth weight, for which reliable information is available in the vital statistics birth microdata. Low birth weight is defined as less than 2,500 grams (or less than 5 lb, 8 oz.). Logistic regression techniques are used to examine differentials in birth outcomes by mother's marital status, after controlling for a number of background variables. The analysis is restricted to singleton deliveries because multiple births are much more likely to be low weight and more frequent among married than unmarried women. We also excluded those births for which information on birth weight was missing (6% in 1996 and 4% in 2006). The final data set includes 332,376 births for 1996 and 406,613 births for 2006.

NONMARITAL CHILDBEARING: AN INCREASINGLY COMMON PATH TO FAMILY FORMATION IN SPAIN

Although out-of-wedlock childbearing was not unknown throughout history in Spain – about 3.8% of all births were to unmarried mothers in 1900 and 5.7% in 1930–, it was an exceptional behaviour, and childbearing within the context of marriage remained the prevailing norm throughout most of the century. During most of the Franco dictatorship (1939-1975), nonmarital fertility remained at very low levels. The influence of Catholicism, which acquired the status of “official religion” during the dictatorship, shaped politics, legislation, and the educational system, endorsing a traditional conception of the family, asymmetric gender relations, and a strict sexual code for women (Nash, 1991). In 1970, Spain (with only 1.3% of births occurring out of wedlock) was, together with Greece (1.1%), the European country with the lowest level of nonmarital fertility.

It is not until 1975, coinciding with the transition to a democratic political system, that a sustained upward trend in nonmarital childbearing begins (**Figure 1**). The gradual democratization of the political, social and family life, the secularization of the society, women's rapid advancement in education and labor force participation, as well as increasing sexual freedom and tolerance towards private behaviour are some of the processes that accompanied this trend. The proportion of out-of-wedlock births increased from 2% in 1975 to 8% in 1985 and to 11.1% in 1995. The pace of change accelerated considerably in the second half of the 1990s, and in 2006 nonmarital births accounted for 28.4% of all births.

The initial rise in nonmarital fertility during the late 1970s preceded the legislative change. In 1981 the Civil Code is amended, the concept of *illegitimacy* is eliminated and the equality of rights among births within and outside marriage is established. It is also important to mention that since 1978 contraception is no longer banned and that since 1985

abortion is accessible on several grounds (Ruiz Salguero *et al.*, 2005). Given that a rapid rise in contraceptive prevalence among unmarried youth (Castro Martín, 2005) and the increasing access to abortion coincide with the rise in nonmarital childbearing, it could be assumed that a large proportion of out-of-wedlock births are wanted.

A former analysis (Castro Martín, 2005) revealed that the increase in the nonmarital birth ratio during the 1980s and early 1990s was mainly due to the increase in the number of unmarried women in reproductive age –as a result of marriage postponement and, to a lesser extent, of marital disruption– and to the decline in marital fertility. From the mid-1990s on, however, the rise in the proportion of out-of-wedlock births is not associated with the decline in marital fertility, but to the continued growth in the unmarried population and to the increased probability among unmarried women to give birth.

In brief, although marriage continues to be the prevailing context for bearing and raising children, out-of-wedlock childbearing has become an emergent pathway to family formation and can no longer be regarded as a marginal behaviour in Spain. Attitudes have changed even more rapidly than behaviour and tolerance for a variety of family forms appears to be quite widespread. According to the Fertility and Family Survey conducted in 1995, 88.4% of women and 81.7% of men agreed with the statement “if a woman wants to have a child on her own and she does not want a stable relationship with a partner, she should be able to do it.” In a recent survey conducted by the Center of Sociological Research (CIS, 2004), 78.8% of respondents declared that they would not consider it a serious problem if a daughter of theirs had a child outside marriage.

THE CHANGING SOCIO-DEMOGRAPHIC PROFILE OF UNMARRIED MOTHERS

Not only has nonmarital childbearing increased rapidly, but its very nature has profoundly changed. Out-of-wedlock childbearing has been traditionally associated to adolescent unplanned fertility, but this portrayal seems to be changing. Whereas in 1980 approximately 1 out of 4 nonmarital births were born to adolescent mothers, in 2006 less than 1 out of 10 births correspond to adolescent mothers. In turn, during this period, the proportion of nonmarital births to mothers over age 30 increased from 20% in 1980 to 44% in 2006.

Numerous studies have warned against equating births to unmarried women and births to lone mothers (Raley, 2001; Sigle-Rushton and McLanahan, 2002). In the European context, a large proportion of births classified as nonmarital are actually born to a cohabiting couple and hence in a family context analogous to that of a married couple. Furthermore, although a birth to a lone mothers reduces her chances to marry in the future (Bennet, Bloom and Miller, 1995), a birth within a cohabitating union increases the probability that the parents will marry in the short term (Manning, 1995); hence, many of the births classified as nonmarital will actually be raised in a marital context.

Birth registers in Spain only collect the legal marital status of the parents and not their family situation *de facto*, so they do not allow to distinguish unmarried mothers living with their partner and unpartnered mothers. The 1995 *Fertility and Family Survey*, however, allows us to estimate the proportion of unmarried mothers that live with the child's father and reveals that 42% of all nonmarital first births correspond to women in a cohabiting union. This proportion varies significantly according to mothers' birth cohort: whereas

among women born in the late 1940s, only 27% of nonmarital births were to cohabiting mothers, the proportion reaches 50% among women born in the 1970s. Mother's age is also associated with her living arrangement. Among adolescent women, the majority of nonmarital births correspond to lone mothers, but among women over 30, the opposite pattern can be found: 65% of births are to cohabiting mothers.

Data from the latest Census, although it only contains information on living arrangements at the time of the Census and not at the time of birth, also confirm that cohabitation is not merely a childless stage before marriage. According to the 2001 Census, 39% of cohabiting partners have children in common.

Concomitant to the increase of nonmarital births whose parents are cohabiting, there has been a dramatic increase in legally acknowledged paternity of nonmarital children. Although Spain does not have statistics on this important issue, we can infer it through an indirect indicator, proposed by Muñoz Pérez (2003): the proportion of nonmarital births for which father's age is reported at the birth registry. This indicator has several drawbacks, since the mother can provide fictitious data in order to avoid the stigma of "unknown father", but can still provide a valid approximation. In 1975 only 23% of all nonmarital births registered father's age, whereas the proportion reaches 94% in 2006. This is a crucial development because, despite formal legal equality, children born out of wedlock cannot actually enjoy the same rights than children born within marriage unless paternity is established.

Another important shift in the profile of unmarried mothers is linked to the rapid growth of immigration that has experienced Spain particularly since the mid-1990s (Arango, 2004). Whereas in the 1991 Census the foreign population comprised less than 1% of the total population, according to the continuous population register, in January 2008 they represented 11.3% of the overall population. This rapid increase has greatly influenced recent demographic dynamics, including total fertility and nonmarital fertility (Roig and Castro Martín, 2005). In 2007, 18.9% of all births in Spain were to foreign mothers –and 21.8% to either foreign mother or father. If we focus on nonmarital fertility, the share of foreign mothers is even larger. For instance, that in 2006, 22% of all nonmarital births correspond to foreign women. The immigrant population is, however, a heterogeneous population and the prevalence of nonmarital childbearing varies greatly according to region of origin. The proportion of nonmarital births is highest among Latin American women (59%) and lowest among Northern African –mainly Moroccan– women (13%).

Besides the demographic profile of unmarried mothers, it is relevant to examine their educational and work profile since, in those households where the father is not present, the opportunities and disadvantages of children born out-of-wedlock are largely conditioned by the socioeconomic level of their mother. Vital statistics do not provide information about mother's education, but according to the 1995 Fertility and Family Survey, the probability of bearing a child outside marriage is significantly higher among women with primary education than among college-educated women (Domínguez and Castro Martín, 2005). Nonetheless, if we compare the educational level of unmarried mothers in successive birth cohorts, we can observe that unmarried mothers from more recent cohorts have higher educational attainment than their counterparts in the preceding cohorts. The participation of unmarried mothers in the labour market has increased significantly over time –although at a slower pace than that of married women. Even though education and labour force

participation are not always a guarantee against poverty, particularly for single mothers raising a family on one income, they significantly reduce the risk of social exclusion.

In sum, as nonmarital childbearing has become more widespread, the socio-demographic profile of unmarried mothers has undergone a significant transformation. As in other societies, the term “single mother” was associated for a long time with images of adolescent women having an unplanned first birth and whose subsequent life trajectories were largely conditioned by this event, often adversely –regarding their educational and labour market opportunities and well as their marriage prospects (Wu, Bumpass and Musick, 2001). Nowadays, however, there is not an homogeneous profile of unmarried mothers: nonmarital births occur within a wide age range, they are not necessarily first births, they may precede or follow a marriage, they are born to both unpartnered women and women living with the child’s father, and they may speed up or slow down the transition to marriage. The changing profile of unmarried mothers could have important social implications. For instance, the fact that 41% of all nonmarital births currently correspond to mothers over age 30 or that 42% of all nonmarital births are born into cohabiting unions suggests that a large proportion of these births are planned (Musick, 2002). Similarly, unmarried mother’s increased education and labour force participation has favourable implications for mothers and children’s welfare. Maternal age, education, labour force attachment, and the presence of a partner in the household significantly reduce the economic, social and emotional vulnerability of unmarried mothers and, hence, the social disadvantages faced by their children (Foster, Jones and Hoffman, 1998).

Still, a significant proportion of nonmarital births correspond to lone mothers with low educational attainment and badly-paid jobs –because of their difficulty to combine work and child care responsibilities. Numerous studies have documented that many of the disadvantages faced by unmarried mothers and their children (McLanahan and Sandefur, 1994) are linked to low household income (Ginther and Pollack, 2004). Hence the importance of social policies aimed at lessening social inequalities linked to family structure and at guaranteeing children’s welfare independently of the type of household they live in (McLanahan, 2004). In this regard, it is in the Nordic countries, with generous social transfers to economically vulnerable households, where the rate of poverty among monoparental families is lowest, suggesting that the relationship between out-of-wedlock births and poverty is not inevitable (Christopher *et al.*, 2001).

Spain is one of the countries of the EU that invest less in family-related support policies (0.5 of the GDP in 2002 compared to 2.2%, the average of the EU) and one of the few countries that has no specific policies directed to monoparental families (MISSOC). Therefore, the recent increase in nonmarital fertility has not been accompanied by any social policy aimed at attenuating the potential vulnerabilities faced by these families. However, it is plausible that the increasing incidence of out-of-wedlock childbearing –the more common, the less selected– and the change in the socio-demographic composition of unmarried mothers have themselves lessened some of the disadvantages faced by unmarried mothers and their children in the past. We will try to test this hypothesis comparing the perinatal health disadvantages of children born out of wedlock in 1996 and in 2006, a period where the nonmarital birth ratio more than doubled (from 11.7% to 28.4%).

PERINATAL HEALTH OF INFANTS BORN TO UNMARRIED MOTHERS

Past studies have documented that lone mothers and their children experience both socioeconomic and health disadvantages (Whitehead, Burström and Diderichsen, 2000). However, although a great deal of research has examined the outcomes for children and mothers in single parent families, few studies have distinguished among separated, widowed, and never-married families. In this section we will focus on low birth weight, as an indicator of the health status of children born in a never-married family. Birth weight has been widely documented in the literature as a predictor of children's long-term health and psychosocial development, as well as an indicator of mother's reproductive health (Boardman et al. 2002; Conley and Bennet, 2000).

The trends recorded in **Figure 2** point to a narrowing gap in the proportion of low weight births among unmarried and married mothers –mainly due to the upward trend among the latter. Even so, the data indicate that low birth weight is still more frequent among unmarried women newborns than among married women newborns. This comparison, however, could be biased because of the dissimilar composition of unmarried and married mothers. In order to take into account potential confounding factors, we perform a logistic regression analysis of the influence of mother's marital status on the risk of having a low weight birth, controlling for a number of birth characteristics (sex, birth order, prematurity) and mother's characteristics (age, labour force status, nationality and town size).

Table 1 provides the odds ratios from the logistic regression models on low birth weight. In the bivariate model (first column), the risk of low birth weight is 43% higher among unmarried mothers than among married mothers. After controlling for the rest of the variables (second column), differentials by mother's marital status attenuate but remain sizable: the odds of low birth weight increase 32% among unmarried women. One of the limitations of this model is that we cannot control for mother's education –this variable is not available in birth statistics–, and since we have previously noted that nonmarital births are more frequent among less educated women, it is possible that observed differentials in infants' weight by marital status are partly due to educational differentials, because education is strongly associated with prenatal care despite universal health-care coverage in Spain. However, with the data available, the results confirm that there exists a health disadvantage for children born to unmarried mothers compared to those born to married mothers, even when several background variables are controlled.

Table 1 also presents a comparable logit model for 1996 in order to explore whether health disadvantages among unmarried mothers' newborns have increased or lessened with time. On one hand, given the association between unmarried motherhood and low birth weight, it is important to check whether the recent rise in nonmarital childbearing has fuelled an increase in the overall low birth weight rate or, on the contrary, whether the increasing prevalence of nonmarital childbearing –which implies less selection– has narrowed the disadvantage gap. On the other hand, given the changing socio-demographic profile of unmarried mothers towards higher education, higher labour force participation and higher cohabitation rates, we have hypothesized that the health disadvantages of children born outside marriage could diminish.

Comparing the logit models for 1996 and 2006, we can observe that, in fact, the risk of low birth weight among unmarried mothers has decreased. In order to test the significance of this reduction, we have pooled the 1996 and 2006 birth microdata files and examined the interactions between marital status and year of birth. **Table 2** presents the results of this analysis. According to these estimates, the risk of bearing a low weight infant is 18% lower

among unmarried women in 2006 than among unmarried women in 1996, although it still remains higher than among married women. These results are congruent with our hypothesis. Although they should be taken with caution, because the potential influence of unmeasured factors, such as healthy behavioural characteristics, wantedness of pregnancy, maternal stress or social support, they provide some evidence that the increasing “normalization” of nonmarital childbearing and the changing profile of unmarried mothers have benefited the health status of their newborns.

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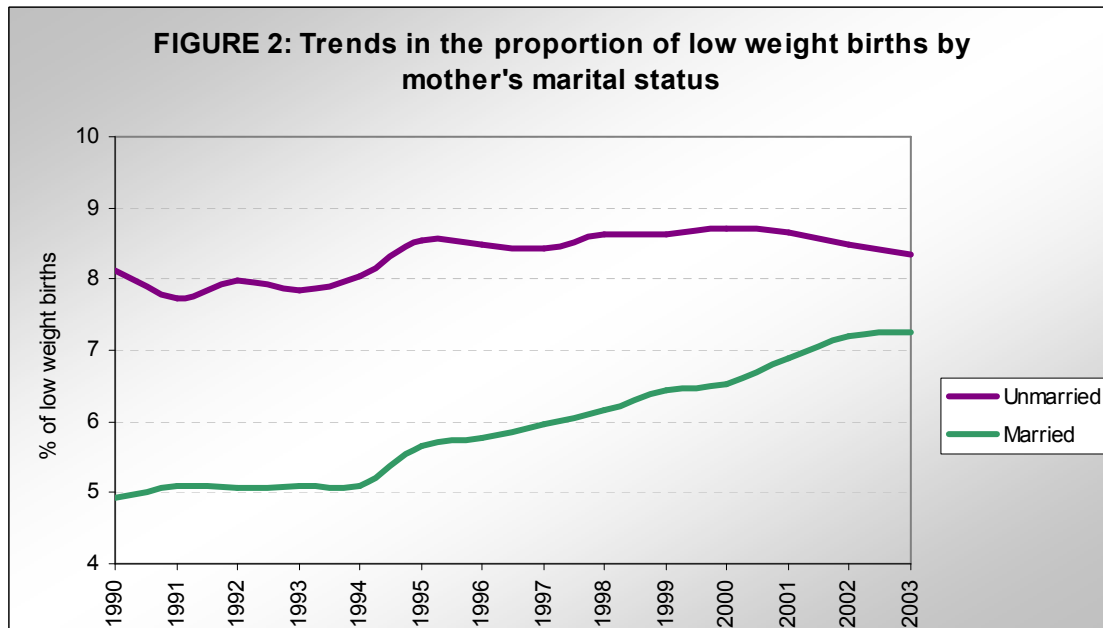
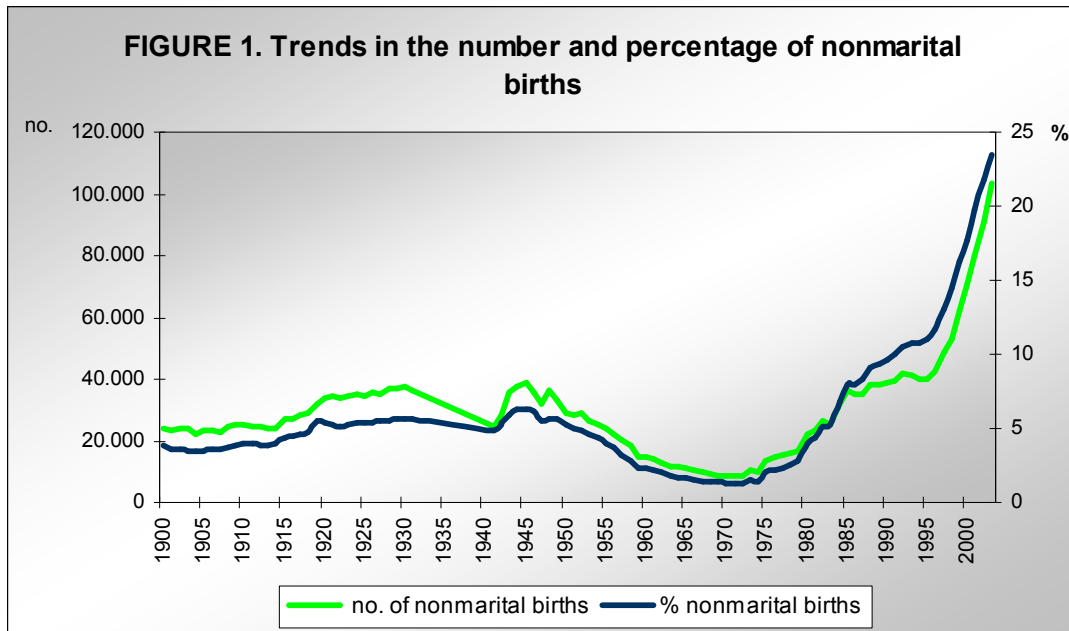


TABLE 1: Logistic regression model of the probability of low birth weight (<2,500 grams)

		2006		1996	
		<i>Unadjusted</i> <i>Odds ratio</i>	<i>Adjusted</i> <i>Odds Ratio</i>	<i>Unadjusted</i> <i>Odds ratio</i>	<i>Adjusted</i> <i>Odds Ratio</i>
Marital status	(Married)	1.00	1.00	1.00	1.00
	Unmarried	1.43 ***	1.32 ***	1.73 ***	1.49 ***
<i>Newborn's</i>					
Sex	(Boy)		1.00		1.00
	Girl		1.40 ***		1.44 ***
Birth order	(1)		1.00		1.00
	2		0.69 ***		0.70 ***
	3		0.68 ***		0.77 ***
	4+		0.74 ***		0.76 ***
Prematurity	(No)		1.00		1.00
	Yes		32.39 ***		45.49 ***
<i>Mother's</i>					
Age	(<20)		1.00		1.00
	20-24		1.09		1.19 **
	25-29		1.09		1.12 *
	30-34		1.12 *		1.17 **
	35-39		1.26 ***		1.33 ***
	40-44		1.45 ***		1.37 ***
	45+		1.11		1.41
Labor force status	(Inactive)		1.00		1.00
	Active		0.88 ***		0.84 ***
Nationality	(Spanish)		1.00		1.00
	Foreign OECD		0.86 **		0.86
	Foreign non-OECD		0.79 ***		0.81 **
Town size	(<20.000)		1.00		1.00
	20.000-100.000		1.00		1.01
	100.000+		1.07 ***		1.10 ***
-2 log likelihood	172194.93		129105.14		126838.21
df	1		17		1

TABLE 2: Logistic regression model of low birth weight on pooled birth files for 1996 and 2006. Test for interaction between marital status and year.

		<i>Unadjusted</i> <i>Odds ratio</i>	<i>Adjusted</i> <i>Odds Ratio</i>
Marital status * Year	(Unmarried 1996)	1.00	1.00
	Unmarried 2006	0.94 *	0.82 ***
	Married 1996	0.58 ***	0.67 ***
	Married 2006	0.66 ***	0.63 ***

Notes: The multivariate model controls for newborn's sex, birth order and prematurity and , mothers' agelabor force status, nationality and town size.

* p<.05, ** p<.01, *** p<.001