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Contribution of Immigration to Adolescent Fertility in Spain Considering the Reproductive Pattern in the Country of Origin

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Adolescent fertility displays a trend that does not follow—and even runs contrary to—the general temporal fertility pattern. Multiple factors determine this trend, including socioeconomic conditions and cultural patterns at both immigrants' place of origin of and their destination. This article analyzes adolescent fertility in Spain with regard to country of maternal origin using records of deliveries (1980–2008) and information from countries with high immigration rates to Spain. After 1980, deliveries to adolescents diminished; after 1996, only Spanish-born adolescents continued this downward trend, but not immigrants. The factors responsible for these differences are diverse and related to the characteristics of the immigrants themselves, in addition to the situation of immigrants in the Spanish context.

Introduction

Since the late twentieth century, adolescent fertility, defined as births to women under 20 years of age, has been considered a social problem in many developed societies because of the economic and health disadvantages that affect both mothers and their children. Adolescent mothers are more likely to be early school dropouts and to have low educational achievement, which results in unfavorable working conditions and limits the possibilities for advanced training activities. These mothers frequently live in fragile unions that often result in divorce or consecutive pregnancies (Guillebaud 2007; Santelli and Melnikas 2010). Children born to young mothers are more likely to be premature, to have low birth weight, and to suffer from complications at the time of delivery, particularly if the woman is under 15 years of age (UNFPA 2007). Moreover, low birth weight is related to higher infant morbidity and mortality. In recent years, adolescent reproduction has become a focus of health care policies (Blanc and Way 2008). Concern has been focused on both the welfare of the child and the risks to adolescent mothers themselves during pregnancy, delivery, and the puerperal period.

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In many Western societies, there has been an increase in the frequency of sexual relations and pregnancy rates among adolescents. In addition, the age at menarche has declined. Other factors like education and changing racial and ethnic origins as a result of recent international migratory movements (Organización Mundial de la Salud [OMS] 2004) have also contributed to modifying the behavior of adolescents.

Historically, adolescent pregnancies have been common in southern Asia, the Middle East, and Northern Africa, especially in societies where marriage takes place within kinship networks. In these regions, young women are more likely to marry immediately after menarche, and by the time they reach full adulthood, they might have been mothers multiple times, a situation that is not regarded as a social problem (OMS 2004). The situation differs in developed countries, where there is widespread education and access to contraception and abortion. According to some authors, low levels of education, employment, or health are the factors responsible for adolescent fertility (Lawlor and Shaw 2002). Conversely, for Scally (2002), adolescent fertility is the causal factor for *a posteriori* problems of public health.

Adolescent fertility rates (AFR; measured by the number of live births per 1,000 women aged 15 to 19 years old) vary widely in the world. For instance, in Latin America, rates are between 56 in Chile and 149 in Nicaragua (UNFPA 1998). In Europe, they range from 4 in Switzerland to 57 in Bulgaria (OMS 2004).

Until 1970, Latin America traditionally had high levels of fertility attributable to early marriage. At the beginning of the twenty-first century, three new patterns can be differentiated: (1) early initiation of extramarital sexual relations simultaneous with the use of contraceptive methods; (2) a similar timing for sexual relations but in the absence of contraception, a situation favoring unwanted single adolescent pregnancies; and (3) the early beginning of stable sexual unions with lack of contraception (CEPAL-UNICEF-SECIB 2001). These last two patterns may constitute a problem and represent what Rodríguez Vignoli (2003) defines as "truncated modernity" in the sense that adolescent maternity requires commitments that come into conflict with desirable academic and professional qualifications.

In Spain, abortion was made legal in 1985. Moreover, there are medical means for avoiding unwanted pregnancies in adolescence through contraception. The rate of adolescent abortions in 1987 was 7.6 percent. By 1995, it had risen to 36.6 percent (Delgado 1999). In 2004, 86 percent of women aged 18 to 19 used modern contraceptives.

After 1980, international migration became particularly important in Spain. Immigrants were attracted by the flourishing labor market and Spain's entry into the European Union in 1986. Although immigration initially had limited repercussions, the 1985 Immigration Law regulated the settlement of new arrivals, mainly Moroccan, Dominican, and Peruvian immigrants. Constitutional Law 4/2000 extended the rights and legal assistance available to immigrants. Agreements signed with Ecuador, Colombia, and the Dominican Republic gave priority to persons of those nationalities, and, in response to the demand for labor, Law 14/2003 granted entry to workers from all countries with existing bilateral agreements (Pedone 2006).

Immigrants were largely responsible for population growth in Spain in the late 1990s. Net immigration accounted for over 80 percent of growth between 2002 and 2008, at which time the foreign population, 30 percent of which came from Latin America, constituted 13 percent of the overall population (Reher and Requena 2009b). Immigration has reversed the country's trend in natural growth (Izquierdo Escribano and López de Lera 2003). Except for the northern regions, over 50 percent of the recovery of Spain's crude birth rate from 2001 to 2005 was attributable to immigrants (López de Lera 2006).

In Spain, fertility underwent phases of change over time: (1) a marked decrease between 1900 and 1950; (2) a recovery until 1960, followed by a plateau period ending in 1975; (3) a new reduction, driving the total fertility rate to below replacement level (1.16 in 1998); and (4) a rise in the twenty-first century, bringing that index up to 1.37 in 2007 (Delgado 2009). Between 1975 and 1987, there was a correspondence between fertility and pregnancy rates, but they subsequently diverged after the legalization of abortion. Between 1975 and 1995, fertility decreased in most age groups, especially the oldest; the exception was adolescents, whose fertility rate increased until 1979, after which it fell.

In Spain, immigrants from countries where fertility is low are mixed with others for whom adolescent fertility remains high despite general reductions in fertility. The aim of this study was to determine whether the reduction of adolescent fertility in Spain followed a homogeneous pattern of change regardless of maternal origin, as general fertility did, or whether change differed for Spanish- and non-Spanish-origin women. This question can only be addressed for the period after 1996, the first year for which the Spanish National Institute of Statistics (INE) began to record the maternal and paternal country of birth on birth certificates.

Materials and Methods

The present study was based on micro-databases provided by the INE that correspond to the individual records of all deliveries occurring in the country between 1980 and 2008. We examined trends for adolescent fertility (individuals aged 15–19 years), but information on the country of origin was available only since 1996. Only nationalities with a strong immigrant presence in Spain were compared. In the case of Latin America—which has highly variable fertility patterns—countries with a higher presence in Spain were chosen. Taking into account the temporal changes of adolescent reproduction displayed in Figure 1, three periods were considered: 1996–97, 1998–2002, and 2003–08.

To compute adolescent fertility rates for each group of immigrants, the number of women aged 15 to 9 by country of origin was needed. However, the numbers in the municipal census updates over several years have some errors. Prior research (Devolder, Domingo, and García 2003; Devolder and Treviño 2007; González-Enríquez 2009) has suggested that certain groups of immigrants (especially Romanians) tend to be undercounted, in part

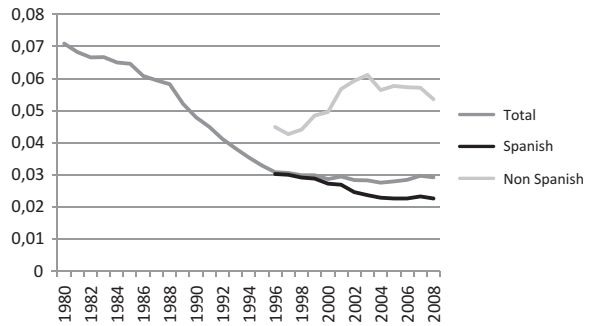

Figure 1. Annual proportion of adolescent deliveries (15–19 years) out of total deliveries (all ages) by Spanish and non-Spanish origin.

because of a lag between the time of arrival and registration. Spanish censuses for 1991, 2001, and 2011 provide the only source of population data.

For the first period (1996–97), the 1996 municipal census was used, since it was the only population record made in this period. This year was marked by the introduction of a special program of register regularization and a new computerized management system for all the municipal registers in Spain (Rosero-Bixby et al. 2011). For the second period, the 2001 census was used, following the approach used by other fertility studies (Roig Vila and Castro Martín 2007). For the last period (2003–08), the adolescent population was taken from the 2005 municipal census, based on a recent paper (Rosero-Bixby et al. 2011) in which the number of immigrants was validated using other sources. This census is considered a reliable source of information (with the exception of some overestimation of the male population originating in Romania, Morocco, and Latin America). Moreover, this was the year of the last immigrant regularization campaign.

With regard to the AFR in countries of origin—the United Kingdom, Romania, and Morocco, as well as selected Latin American countries (Argentina, Bolivia, Colombia, Peru, and the Dominican Republic)—information was obtained from the World Bank's Population Division (http://data.worldbank.org/indicator/SP.ADO.TFRT/countries). The annual rates were averaged in order to estimate the AFR corresponding to the periods considered in this study.

Results and Discussion

Spanish Versus Non-Spanish Adolescent Reproductive Patterns

Figure 1 shows the time trend in the proportion of adolescent deliveries among all Spanish deliveries, separated by Spanish or non-Spanish maternal origin. Figure 2 shows the AFR. Taking 1980 as the year of the start of the decrease in adolescent fertility in Spain, a fall in the proportion of adolescent deliveries relative to total deliveries can be observed. From 1988 on, the steeper slope indicates acceleration—possibly the consequence of abortions—and from 1998 on, the proportion of total deliveries occurring for adolescents was close to constant. From 1996, the year for which information on maternal nationality is first available, two different trends can be seen. While the proportion of Spanish adolescent deliveries continued to decline, the adolescent delivery rate for immigrants grew to reach its maximum in 2002 (probably as a result of the 2000 Constitutional Law, which attracted new immigrants). Subsequently, this trend diminished slightly until 2008, possibly as a result of

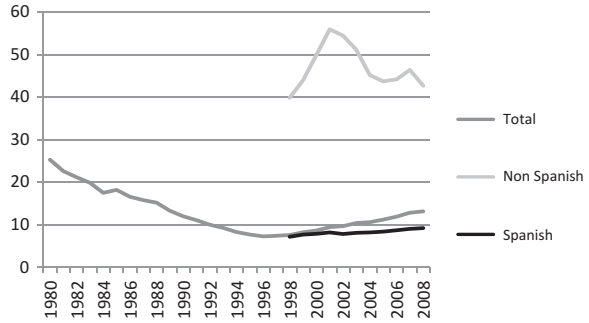

Figure 2. Adolescent (15–19 years) fertility rate by Spanish or non-Spanish origin.

a deceleration in the migrant inflow in recent years. These results are in agreement with those found by Roig Vila and Castro-Martín (2007), who reported a reduction in fertility between 1998 and 2002, with the exception of the adolescent group.

The evolution of the AFR (see Figure 2) showed that from 1998 onwards, the fertility of non-Spanish adolescents rose, while that of Spanish adolescents remained constant overall. The non-Spanish rate far surpassed that of the Spanish group. The AFR curve shows a relatively similar shape to that of total deliveries (see Figure 1) and indicates that the immigrant population not only includes more adolescents who reproduce, but also has more children than the Spanish native-born population. The subsequent reduction has coincided with the current economic recession, which now mainly affects foreign residents (Reher and Requena 2009b).

Figure 3 shows the percentage contribution to total live births by adolescents in Spain, with regard to area of origin. In the first period considered (1996–97), African women—mainly Moroccans—were the primary contributors to immigrant adolescent births. In the second period (1998–2002), European immigrants—mainly from Romania—were significant contributors, but not as much as immigrants from Latin America, who showed growth in each period, whereas immigrants from Asia decreased their share of deliveries.

Adolescent Fertility in Areas Emitting Migrants

The AFRs shown in Figure 4 correspond to the countries of origin with the highest representation of immigrants in Spain, as well as the fertility rates of Spanish and of aggregate non-Spanish adolescents.

The figure shows that the AFRs in all Latin American countries considered—with the exception of Cuba in the later two periods—surpassed those of the other areas (Romania, the United Kingdom, and Morocco), as well as the average of all adolescents reproducing in Spain (Spanish and non-Spanish). Adolescent fertility in Latin America and the Caribbean has been very high and is characterized by a "young reproductive pattern" (Cavenaghi and Diniz Alves 2009).

Among all areas of origin, Cuba, Argentina, and Peru have the lowest AFRs. In Cuba, legal abortion constitutes the main reproductive control mechanism for adolescents. In Argentina, although abortion is illegal, its incidence is estimated to be 37 percent of pregnancies (Wong 2009) or even higher (Steele and Chiarotti 2004). In Argentina, there

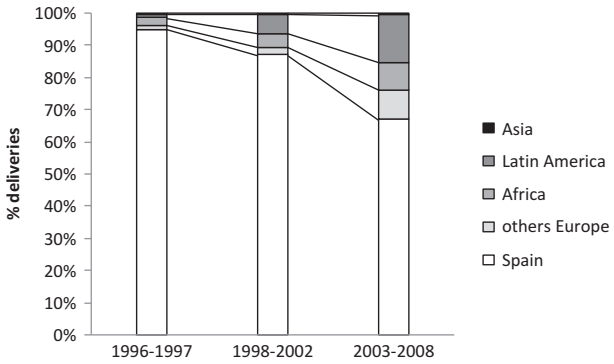

Figure 3. Percentage of Spanish deliveries to mothers from other continents, other European countries, and Spain.

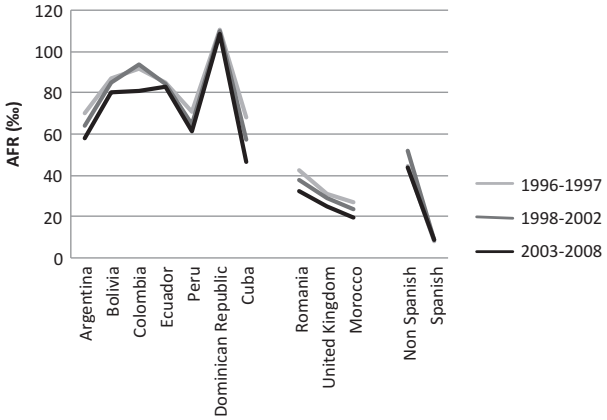

Figure 4. Adolescent fertility rate (AFR) in the country of origin. Left: Latin America; middle: Central Europe and Africa; right: present study (Spanish and non-Spanish).

is wide educational variation and extensive marginal urban sectors in which an adolescent pregnancy is perceived as a positive occurrence (Franco et al. 1998); in the same is true for Peru (Guzmán, Contreras, and Hakkert 2001). The highest AFRs in Latin America are found in the Dominican Republic, Ecuador, Bolivia, and Colombia. These countries also have considerable educational variation. The elevated AFRs are concordant with a low prevalence of contraception, especially in Bolivia and Ecuador. The case of Colombia is different, since contraceptive use in that country has risen to be one of the highest in Latin America. In most of these countries, adolescent pregnancy often induces a wedding or informal union, rather than abortion.

Table 1 shows each country of origin's AFR, the respective AFR in Spain, and the contributions of each country with respect to the total number of adolescent immigrants (PI). The AFR for the period 1996–97 corresponds to 1997, since this statistic is not provided by the World Bank for 1996. The 1996 Spanish census only records a few Latin American nationalities (such as Argentina and Cuba). The remaining Latin American nationalities appear grouped as "other Latin countries." There is no doubt that the sex ratio and the length of residence in Spain affect fertility, but this information was unfortunately unavailable.

The percentages of adolescent immigrants roughly correspond to the observed migratory processes. In 1998, nearly half the foreign arrivals were from Europe and Africa, mainly Morocco (Reher and Requena 2009a). In 2000–07—the period of maximum immigration—these nationalities declined in importance, while immigrants from the Andean countries, followed by those of Eastern Europe, rose in importance. The most stable group was arrivals from the rest of Latin America (Reher and Requena 2009a; Reher and Requena 2009b).

In the first period, with the exception of Romania and Morocco, ARFs were higher in the countries of origin than in Spain, but Cuban adolescents maintained a similar AFR as their counterparts in Spain. The adolescents with the highest AFR in the first period in Spain included Romanians, Moroccans, and Dominicans, but there were fewer Romanians than the others in the Spanish population. In sum, the greatest contribution in this period was made by Moroccans (elevated AFR and considerable numerical representation).

After 1998, Moroccan births and AFR decreased, although their immigrants in Spain had even higher levels than in the country of origin. Despite this reduction, Moroccans

Table 1
Adolescent fertility rates in countries of origin and in Spain among immigrant adolescents

	1996–1997			1998–2002			2003–08		
	Origin	Spain	PI (%)	Origin	Spain	% PI	Origin	Spain	PI (%)
Romania	42.0	72.8	0.8	38.0	75.7	4.1	32.8	85.4	15.7
United Kingdom	31.0	13.9	14.3	28.6	21.7	3.6	25.3	16.4	4.4
Morocco	27.0	82.9	36.1	23.2	50.4	27.4	19.5	74.2	21.2
Dominican Repub.	111.0	58.0	8.5	110.2	30.2	6.9	108.8	43.6	5.4
Argentina	70.0	12.1	9.8	64.4	11.9	4.8	58.0	12.9	6.9
Cuba	68.0	54.9	2.6	57.2	23.6	2.7	46.7	18.9	1.6
Bolivia	87.0			85.2	46.6	1.1	80.2	102.4	3.8
Colombia	92.0			94.2	28.9	18.2	81.2	43.2	11.7
Ecuador	85.0		15.8*	84.5	52.0	24.3	83.2	58.6	23.8
Peru	71.0			65.0	16.9	3.5	61.5	21.9	3.4

Notes: Origin: AFR (per thousand) in the country of origin; Spain: AFR (per thousand) in Spain of immigrants from the respective countries. PI: percentage of total immigrant Spanish adolescents from each country. *Other Latin American countries.

and Ecuadorians were the two groups who contributed the most to adolescent fertility in Spain. This coincided with an approximately 20 percent increase in the AFR for the total immigrant group in Spain (see Figure 2). Romanians had the highest rates, but a relatively small adolescent immigrant population. Again, the AFR of Moroccans and Romanians increased during this period, while that of other groups decreased.

Finally, with the massive influx of immigrants in the final period, there was a notable rise in the AFRs of Bolivians, Romanians, and Moroccans. The AFRs of Bolivians in Spain surpassed those of their area of origin; in Romania and Morocco, the rates were nearly three times higher than they were in Spain. However, the relative contribution of these groups' AFRs in Spain varied with their representation within the immigrant population. The Moroccan adolescent population declined, while that of Romanians nearly quadrupled. Bolivians still had a small representation. Adolescents from Ecuador increased their AFR. In this last period, the growth in Romanian births may have been a consequence of the removal of the visa requirement for entry into Spain in 2002 (Stanek 2009), at precisely the time a visa became obligatory for Colombians, whose arrival numbers fell by a factor of five (González and Echeverri 2009). In the latest wave of migration, the AFR in Spain increased as a result of Moroccan, Ecuadorian, and Romanian input.

The scatter plot in Figure 5 illustrates the existence of three different adolescent reproductive behaviors for the countries of origin and the country of destination over the whole period: (1) adolescents from Latin America had a lower AFR in Spain than in their country of origin, except in the case of Bolivians in the 2003–08 period; (2) women from the United Kingdom had a slightly reduced AFR in Spain; and (3) Moroccans and Romanians had a higher AFR after settling in Spain. What are the possible explanations of these differential contributions to adolescent fertility in Spain? They must be related to the particular characteristics of the immigrants, in addition to their specific situation in the Spanish context.

In Spain, Moroccans have a high sex ratio (192 in 2007) and a low proportion of unpaired women (2%), which is indicative of these women's high reproductive possibility.

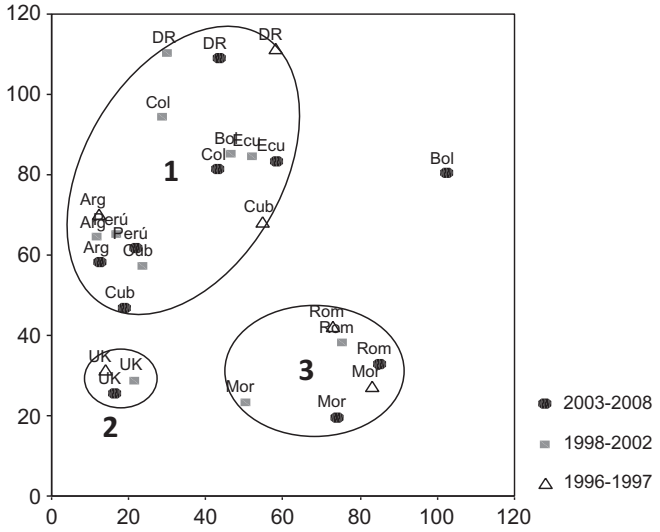

Figure 5. Scatter plot representing the AFR in country of origin (y-axis) and the AFR in Spain (x-axis) for selected countries. Ellipses: distinct patterns (1 = Latin America, 2 = United Kingdom, 3 = Romania and Morocco). Countries: Arg = Argentina; Bol = Bolivia; Col = Columbia; Cub = Cuba; DR = Dominican Republic; Ecu = Ecuador; Perú = Peru; Mor = Morocco; Rom = Romania; UK = United Kingdom.

Their final fertility is 2.75 (Cebolla and Requena 2009). In Spain, Moroccan immigrants have a higher proportion of illiteracy (21.2%) and 57.7% of them have not attended school at the high school level, both percentages higher than Moroccans in Morocco. These women exhibit lower rates of economic activity and an inferior labor position. They devote themselves mainly to domestic labor and maintain traditional family roles. Elevated endogamy (as high as 89% for women) contributes to the maintenance of traditional patterns. Of all immigrants, Moroccans report the longest period of residence in Spain (Cebolla and Requena 2009).

Romanian immigrants have a sex ratio of 118 (Stanek 2009), which may facilitate women finding a partner. In Romania, only 6.3 percent of the population has a low educational level (Stanek 2009), but most Romanian immigrants in Spain have a secondary educational level. Adolescent fertility in Romania has decreased since 1980 (Singh and Darroch 2000), and the abortion rate is 68 percent (Delgado 1999). Abortion was used in Romania during this period as a contraceptive method because it was free, which was not the case in Spain. Although their rate of labor force participation in Spain is high (67%), half of Romanian immigrants are employed in low-skilled work that is below their qualifications in their origin country.

The contribution of Latin American countries—especially Ecuador—to Spain's AFR is significant. In Latin America, adolescents have not followed the general trend toward a reduction in fertility (Guzmán, Contreras, and Hakkert 2001). Contraception remains scarce, especially in Andean countries. Although adolescents from this area have substantially lower rates of pregnancy in Spain than in their places of origin, they represent nearly 38 percent of total immigrant adolescent births in Spain. It is possible that contraception as well as induced abortion may play a part in the reduction of rates in Spain. For young Latin American immigrants, the use of contraceptives has been measured as 69.6 percent (Bermúdez et al. 2010). With regard to abortion, a report from the Spanish

Ministry of Health and Social Policy (2008) measures percentages of abortion as 55.5 percent for Spanish and 44.6 percent for foreign-born women. Among the latter group, only 23.3 percent of abortions correspond to South American women.

Among Latin Americans, Ecuadorians' immigration to Spain has been motivated by the possibility of work, mostly in the domestic sector. In 2008, their sex ratio was 94, indicating a surplus of young women. They had a balanced percentage of married and single individuals (50% in free unions), with very high extramarital reproduction and many living in households consisting of several couples with their children (Sanz Gimeno and Domínguez 2009)—the consequence of the integration of family networks resulting in family reunification (Reher, Requena, and Rosero-Bixby 2009). Ecuadorians, Colombians, and Bolivians have the highest levels of national endogamy (Cortina, Esteve, and Cabré 2009). Ecuadorians have slightly higher levels of education than Colombians and Bolivians, but other factors relating to their cultural patterns may have an influence on their high AFR in Spain.

The countries with the next highest AFRs are Colombia, Bolivia, and the Dominican Republic. Immigrants from the two last countries are young, with a net female presence and a high prevalence of common-law couples. They usually live in households composed of several couples, with a mean of 3.7 children for Bolivians (Sanz Gimeno and Domínguez 2009), and in cities form small ghettos with other immigrants (Romero Valiente 2003) where family support networks are strong, thus promoting endogamy. Schooling is intermediate to low for these groups, and most women have unskilled jobs. We consider the reason that these women maintain their high fertility to be the same as that of Ecuadorian women. Colombians have the highest relative education level compared to Bolivians and Dominicans. Given the recent increase in the use of contraceptives in Colombia, immigrants from this country are probably bringing the same contraceptive patterns to Spain.

Finally, the United Kingdom, Argentina, and Peru are the nationalities that contribute less to adolescent fertility than to the adolescent population. The Western European (United Kingdom) group is the most highly educated of the three (Castro Martín and Rosero-Bixby 2011), and adolescents from the United Kingdom in Spain have the lowest AFR of the three. Peruvians have relatively high educational levels, with a significant number of women in higher-ranking jobs (Sanz Gimeno and Domínguez 2009). Argentineans have been immigrating to Spain for a long period of time and have an elevated mean age (40.7) and a very high educational level (35.5% have a university education). This percentage exceeds that of the Spanish adolescents.

In summary, the two immigrant groups with the lowest educational levels in Spain are those from Morocco and Romania. In Spain, both groups show a pattern of strong processes of family regrouping, as they also have the support of networks of fellow nationals. These factors most probably influence the high AFRs for these two groups. The same pattern of high fertility, in combination with an elevated number of births to single mothers and high endogamy (Cortina, Esteve, and Cabré 2009), is found in many Latin American adolescents, particularly Ecuadorians, Bolivians, and Colombians (with more than 85% of births being extramarital).

Unfortunately, no information is available on the age of adolescents at the time of immigration, a factor that is known to strongly influence reproductive behavior (Anderson 2004). According to our results, marital status does not influence the AFR: adolescent Moroccans have children as married women, whereas Romanians and most Latin Americans do not. However, North African women are more likely to migrate to Spain for marriage or family reunification than for work (Roig Vila and Castro-Martín 2007). In this case, migration has a positive effect on their fertility, considering that the AFR in their

country of origin is the lowest of all the countries compared here. Frank and Heuveline (2005) have reported a similar situation for Mexicans in the United States, with higher AFRs in the destination country than in the country of origin, which increase with acculturation. This is a paradoxical phenomenon; however, similar situations are found in other countries that receive immigrants.

The case is different for Romanians, who come from a country with high adolescent fertility. Many of these adolescents have probably participated in the migratory process, in addition to the experience of regrouping in Spain at a young age, especially those with lower levels of schooling and single women. Their AFR exceeds the Spanish rate and that of many immigrants from other countries, and they maintain traditional patterns concerning endogamy and frequent single maternity, likely influenced by the behavior of their co-nationals.

Latin Americans are characterized by their relatively high adolescent fertility, although their rates in Spain are lower than those in their countries of origin. Roig Vila and Castro-Martín (2007) report that the prevailing childbearing context is nonmarital and more frequently among adolescents, with a pattern of poor schooling, endogamy, and family regrouping, with this last factor providing protection for these young mothers. These results demonstrate that the higher the previous fertility, the stronger the depressor effect of migration on fertility (González and Echeverri 2009). Other factors worth considering are the slightly higher average educational levels of Colombians and Peruvians in Spain than in their countries of origin, and finally the high educational level of Argentineans in Spain, a clear factor that may facilitate better control of their fertility.

According to Ariza (2002), a shift in fertility is more a response to the sociocultural environment than a genuine transformation of the reproductive pattern. However, this is not a general rule, as can be seen for immigrants in Spain. Adolescent fertility depends on the multiple and sometimes particular interactions of age, education, mating patterns, traditions in the country of origin, socioeconomic level, and the situation in both the private and public spheres in the receiving society. This reality can be verified by considering the different situations documented for other countries. Persson (2009) reported that immigrants in Switzerland continue to maintain marked differences from natives and that the tendency to have children continues to be higher for recently arrived women; a similar pattern has been observed in France (Toulemon 2004) and Germany (Schmid and Kohls 2009).

Thus, variation in behavior and the determining factors with respect to reproduction are numerous. However, when this behavior concerns adolescents, the combination of the factors indicated (namely, a predominance of unfavorable socioeconomic conditions and a low educational level) can lead to the emergence of additional problems, as mentioned in the introduction to this article. Fuster et al. (2010) reported that the birth weight of children born to foreign mothers in Spain exceeds that of children born to Spanish mothers. However, stillbirths and premature births in Spain occur predominantly among adolescent foreign mothers—mainly Moroccans, Romanians, and Latin Americans—with low educational levels, poorly skilled jobs, and low salaries (Román-Busto et al. 2011). Under these circumstances, adolescent fertility constitutes a public health problem, especially in groups with a higher AFR such as Moroccans, Romanians, or certain Latin American populations.

Conclusions

The AFR has been falling in Spain since 1980. From 1996, the first year for which information on maternal nationality is available, two different patterns can be observed: whereas the fertility of nonnative Spanish adolescents rose until 2002, that of Spanish adolescents

remained constant. There was little change from 2002 to 2008as a result of the deceleration in the migrant inflow in recent years.

For the period considered, all the sending countries (except Romania and Morocco), especially those in Latin America, had higher AFRs than did adolescents from these countries of origin residing in Spain. Once settled in Spain, three distinct patterns were found: the AFR generally decreased among adolescents from Latin America, it was slightly reduced among women from the United Kingdom, and it was higher among Moroccans and Romanians.

Differences in adolescent fertility vary depending on the group considered. Ethnic background and cultural practices are key factors, but new behaviors related to fertility have appeared in almost all groups considered. Adolescents from countries such as Argentina, the United Kingdom, and Peru who have both higher educational and higher socioeconomic levels in Spain than in their country of origin have low fertility levels in Spain, even lower than that of Spanish adolescents. In the majority of the remaining cases, the low educational level of teenage mothers, poor access to modern contraceptive methods, low-ranking jobs, low wages, and unemployment in Spain are factors associated with high fertility. However, adolescent fertility levels are also influenced by other factors that have varying impacts depending on the characteristics of each group; these include marital status, endogamy, and the very frequent processes of family reunification.

An approach to the problem of adolescent fertility should consider multiple factors with the aim of preventing undesirable consequences that affect young mothers and their children. This is especially important in the present situation of instability and economic crisis in Spain.

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