Adolescent fertility trends and factors in Niger: analysis of the Total Cohort Fertility in Adolescence (TCFA)

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SOME SHORT RESULTS

Abstract

Background: Girls aged 10-19 currently represent 12% of the Niger population (2020). And this number will continue to grow in a country with the highest fertility rates worldwide. In this context, adolescent sexual and reproductive health is a significant challenge for healthy fertility.

Objectives: This study investigated Niger adolescent (under-20) cohort fertility, its trends and associated factors.

Methods: Using the Niger four demographic and health surveys (1992, 1998, 2006 and 2012), the study mobilised descriptive methods: the total cohort fertility in adolescence (TCFA) computation, the distribution of cohort women according to the number of births they had during their teenage years, computation of cohort mean age at adolescent childbearing. It also used Logistic and Poisson models to analyse the factors associated with adolescent cohort fertility.

Findings: The TCFA was 1.29 in the cohort of women aged 20-24 at the time of the 1992 DHS. It declined to 1.13 in the 1998 DHS, then to 1.08 in the 2006 DHS, and increased to 1.17 in the 2012 DHS. The share of women who had at least one adolescent birth changed over time but not significantly: 70% in the cohort of women aged 20-24 at the time of the 1992 DHS, 66.5% in the 1998 DHS cohort, 64% in the 2006 DHS cohort and 69% in the 2012 DHS cohort. Furthermore, early sexual intercourse and marriage, infant mortality, the desire for a large family, and urbanisation are among the factors significantly associated with adolescent fertility in Niger.

Conclusions: The high level of adolescent fertility in Niger does not seem to be changing. This situation could result from the low level of education, the context of a patriarchal society that does not favour women's empowerment and traditional values that make children social and old age insurance for parents.

Keywords: Total Cohort Fertility in Adolescence (TCFA); adolescent fertility; mean age at adolescent childbearing; Demographic and Health Surveys (DHS); Niger.

Trends of Total Cohort Fertility in Adolescence (TCFA) in Niger

  a. Trends of TCFA

In Niger in 1992, in the 20-24 age cohort, the TCFA was 1.29. It declined to 1.13 in 1998, 1.08 in 2006 and then increased to 1.17 in 2012. **Figure 1**, which presents these results, also shows trends in total cohort fertility at ages 18, 17, 16, 15, and under 15.

Figure 1. Variation in the total cohort fertility in adolescence in Niger, 1992-2012
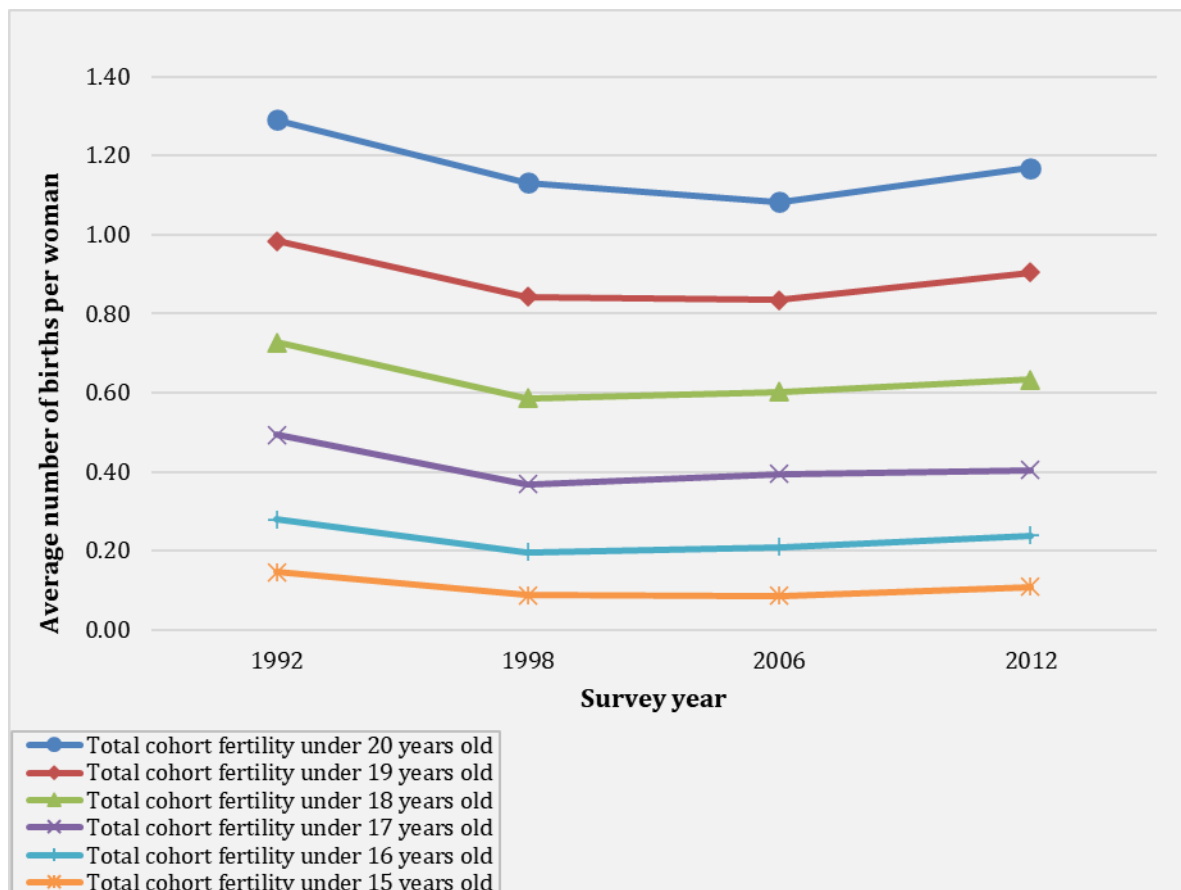
Geographic variation in the TCFA in Niger (**Figure 2**) showed that in 1992, of the eight current regions of the country, only Niamey had a TCFA below 1 (0.75). Six of the other seven regions had a TCFA between 1.25 and 1.50. One region (Maradi) had a TCFA greater than 1.50 (1.66). Analysis of the trends in the TCFA in the country's regions between 1992 and 2012 showed that it decreased significantly in the regions of Agadez (from 1.45 to 0.62), Dosso (from 1.41 to 1.01), Tillaberi (from 1.31 to 1.10), Tahoua (from 1.44 to 1.25), and Niamey (from 0.75 to 0.61). It declined slightly in Maradi (from 1.66 to 1.57) and Zinder (from 1.41 to 1.38). But in the Diffa region, the TCFA increased between 1992 and 2012, from 1.42 to 1.56.

Figure 2. Regional variations in the total cohort fertility in adolescence in Niger, 1992-2012
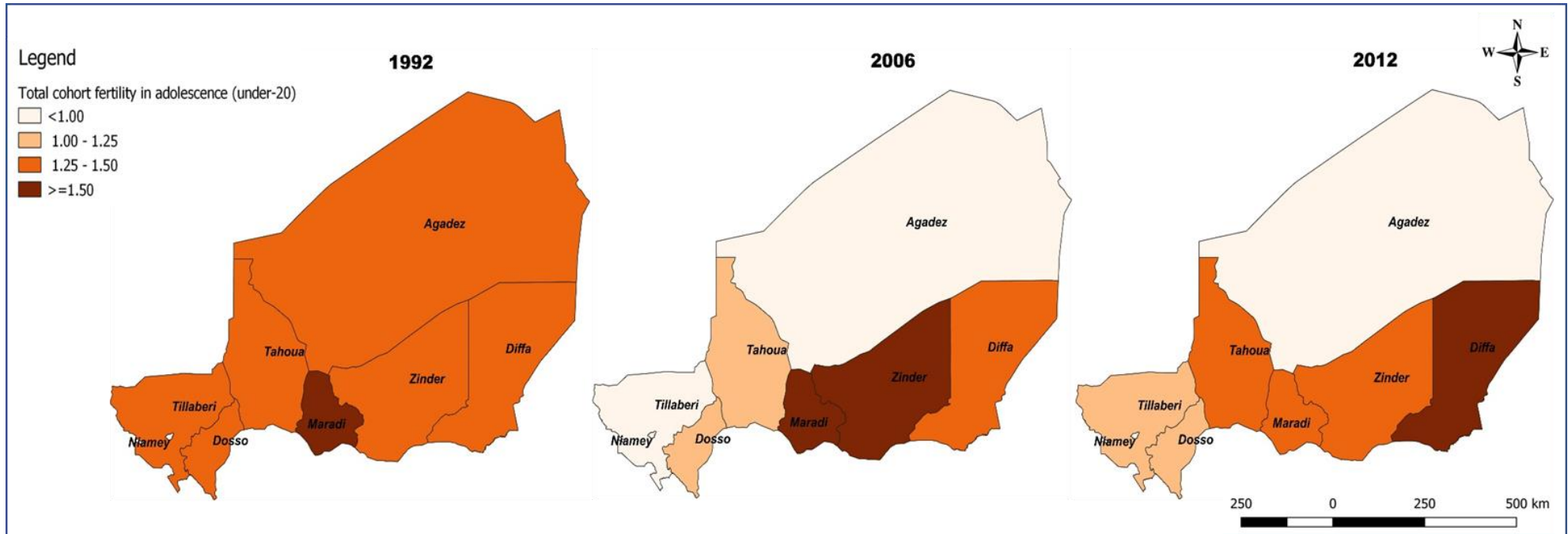
b. Distribution of cohort members according to the number of their adolescent births

The box plot (**Figure 3.A**) on the number of births per woman during adolescence allows us to highlight extreme values. For example, for the 1998 survey, a woman in the cohort had 7 births before her 20th birthday. This maximum was 6 births (only one woman was involved) in 1992, 5 in 2006 (4 women were each involved) and 5 in 2012 (4 women were each involved). Of course, the minimum value was 0 children per woman. And **Figure 3.B** shows that in each of the cohorts, between 30% and 35% of young women had 0 births by age 20, between 30% and 34% had a single birth, about 25% had 2 births, and between 9% and 14% had 3 or more births.

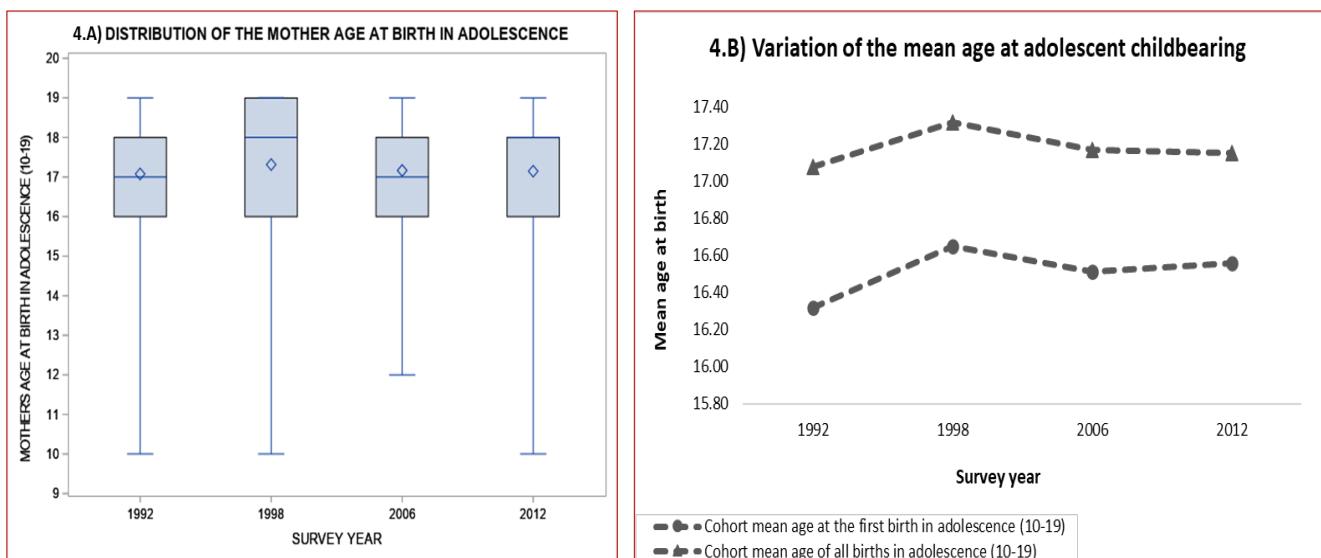**Figure 3. Number of births and cohort members' distributions**
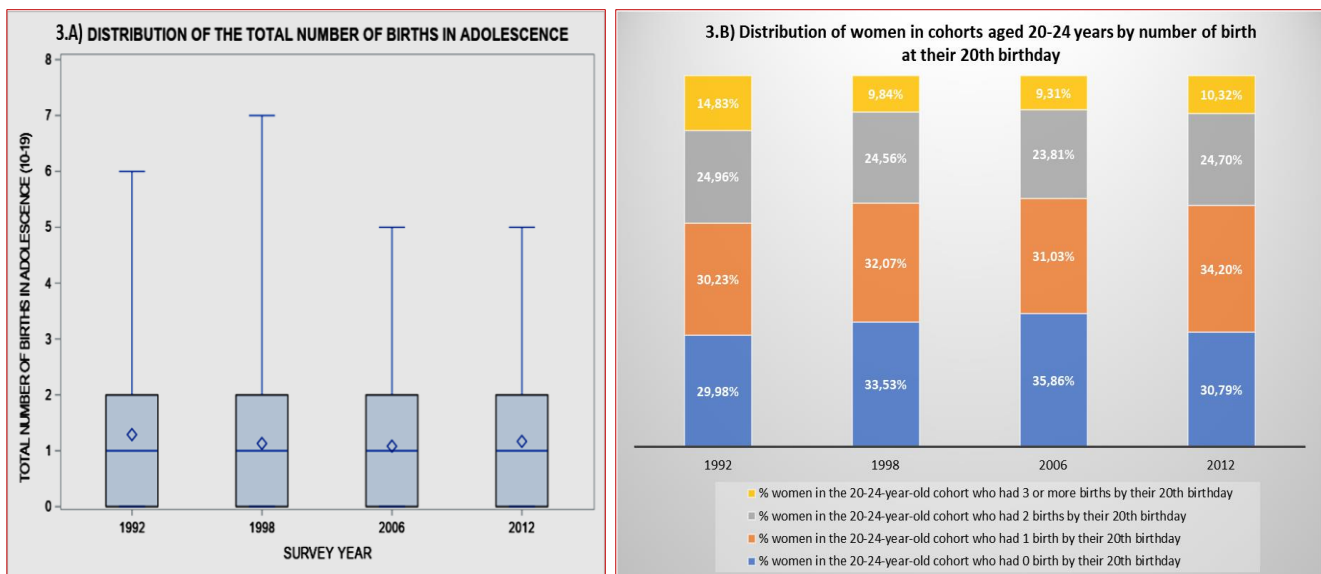
c. cohort mean age at adolescent childbearing

The mean age at adolescent childbearing (**Figure 4.B**) was around 17 years old in each cohort (17.1 for the 1992 survey cohort, 17.3 for the 1998 survey cohort, 17.2 for the 2006 and 2012 survey cohorts, respectively). The mean age at first adolescent childbearing was 16.5 years old overall, with 16.3 (the lowest) for the 1992 survey cohort and 16.7 (the highest) for the 1998 survey cohort.

Note that for all cohorts combined, the minimum maternal age was 10 years (the maximum was obviously 19 years, i.e., the end of adolescence) (**Figure 4.A**).

Figure 4. Distribution of the mother's age and variation of mean childbearing age

Appendices