Adolescent Fertility Trends and Factors in Niger: Analysis of the Total Cohort Fertility in Adolescence (TCFA)

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1. Purpose of the Study

o Girls aged 10-19 currently make up 12% of Niger's population (2020). With such a high proportion of adolescent girls, Niger faces significant sexual and reproductive health challenges.

o This study examined **adolescent fertility** in Niger, its **trends** and associated **factors**.
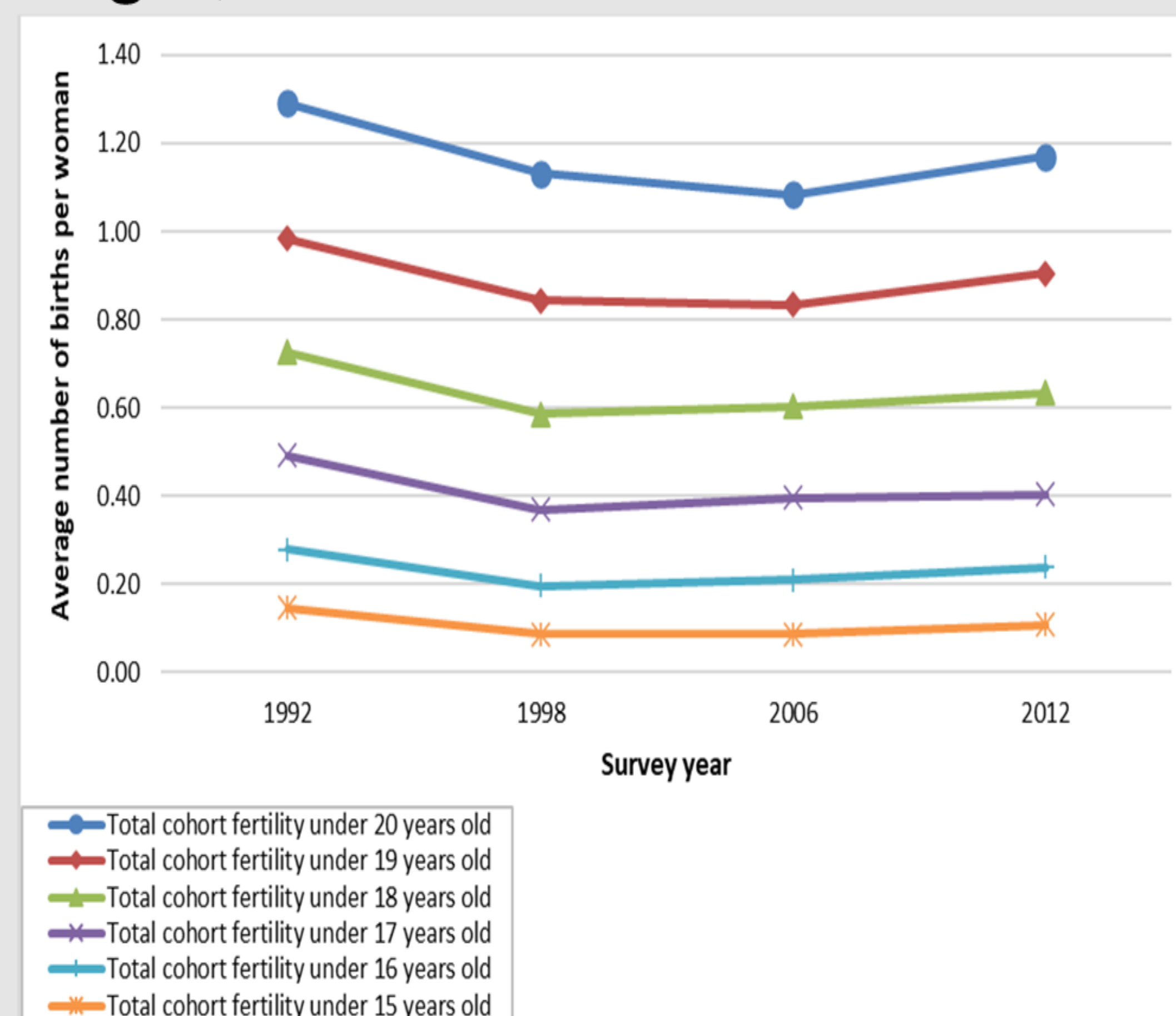
2. Methods

o <u>Data</u>: Niger's **Demographic and Health Surveys (DHS)** conducted between 1992 and 2012.

o <u>Descriptive methods</u>: **Total cohort fertility in adolescence (TCFA)**, and the Distribution of the number of adolescent births.

$$TCFA = \frac{total\ number\ of\ births\ in\ adolescence\ of\ women\ in\ the\ cohort}{total\ number\ of\ women\ in\ the\ cohort} = \sum_{x=10}^{19} f_x^c$$

o <u>Multivariate methods</u>: Logistic and Poisson models to analyse adolescent fertility factors.

3. Key Findings

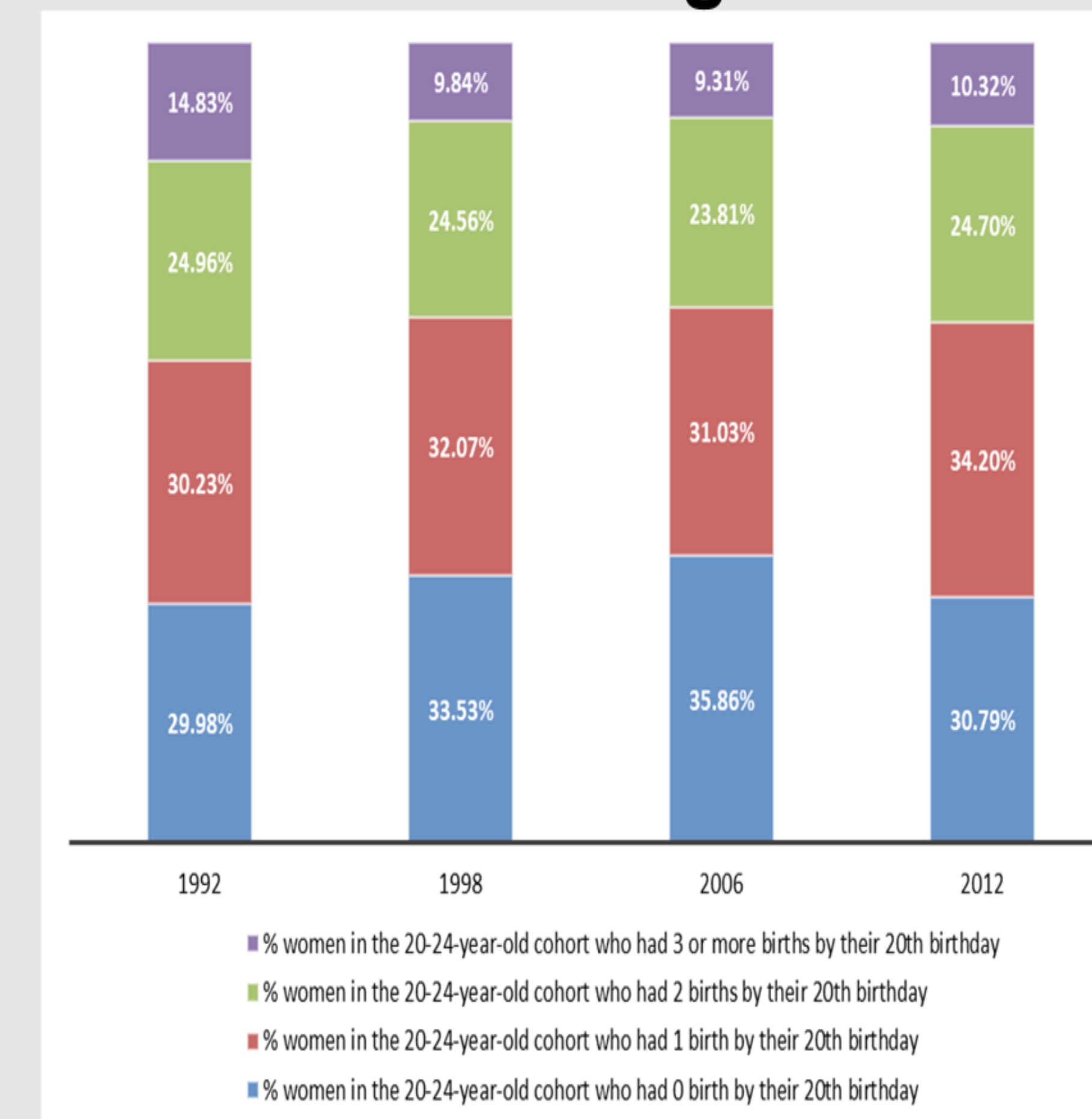**Fig. 1.** Variation in the TCFA in Niger, 1992-2012.

o A high but stable TCFA in Niger: *1.3 births per adolescent in 1992, and 1.2 in 2012* (*Fig.1*).

o TCFA by region in in Niger 2012: 0.61 in Niamey, 0.62 in Agadez, 1.01 in Dosso, 1.25 in Tahoua, 1.38 in Zinder, 1.48 in Maradi and 1.56 in Diffa.

Fig.2. Distribution of young women according to the number of teen-age births.

o In each of the cohorts, 30%-35% of young women had 0 births by age 20, 30%-34% had a single birth, *about 25% had 2 births, and 9%-14% had 3 or more births* (*Fig.2*).

Table.1. Factors influencing the number of children born alive during adolescence in Niger.

Variables	N (%)	Odds ratio (OR)	95% Confidence Limits		p-Value
Age at 1st sexual intercourse					
<13	443 (7%)	Ref (OR=1.000)			
13	594 (8%)	0.587	0.267	1.291	0.186
14	926 (15%)	0.505	0.238	1.070	0.074
15	1,238 (20%)	0.648	0.305	1.380	0.261
16	707 (11%)	0.536	0.238	1.206	0.132
17	650 (10%)	0.411	0.178	0.948	0.037
18-19	734 (12%)	0.164	0.073	0.369	<.0001
Did not have sex before 20	1,048 (17%)	0.007	0.003	0.017	<.0001
Age at first marriage/union					
<13	497 (8%)	5.730	2.283	14.386	0.0002
13	525 (8%)	9.330	3.491	24.936	<.0001
14	909 (15%)	11.125	4.581	27.015	<.0001
15	1,154 (18%)	5.126	2.208	11.902	0.0001
16	688 (11%)	4.274	1.873	9.751	0.0006
17	598 (10%)	2.535	1.121	5.732	0.0254
18-19	1,189 (19%)	1.592	0.734	3.450	0.2390
Not married before 20	728 (12%)	Ref (OR=1.000)			
Ideal number of children					
3 or less	294 (5%)	Ref (OR=1.000)			
4-6	2047 (33%)	2.222	1.435	3.440	0.0003
7-9	1,342 (21%)	2.867	1.831	4.490	<.0001
10 or more	1,839 (29%)	2.414	1.557	3.741	<.0001
Don't know & Other non-numerical response	728 (12%)	3.525	2.185	5.687	<.0001
Knowledge of the ovulatory cycle					
Correct knowledge	1,049 (17%)	Ref (OR=1.000)			
Questionable knowledge	3,320 (53%)	1.171	0.932	1.471	0.1765
Lack of knowledge	1,881 (30%)	0.827	0.648	1.055	0.1262
Knowledge of any contraceptive method					
At least 1 method	5,276 (84%)	Ref (OR=1.000)			
Knows no method	974 (16%)	0.502	0.413	0.611	<.0001
Current use of any contraceptive method					
At least 1 method	752 (12%)	Ref (OR=1.000)			
Use no method	5,498 (88%)	0.632	0.482	0.829	0.0009
Current marital status					
Never in union	853 (14%)	Ref (OR=1.000)			
Married/in union	5,136 (82%)	1.094	0.511	2.341	0.8166
Widowed/Divorced/separated	261 (4%)	0.517	0.227	1.176	0.1156
Type of place of residence					
Urban	2,289 (37%)	1.287	1.029	1.609	0.0273
Rural	3,961 (63%)	Ref (OR=1.000)			
Cohort					
Women aged 20-24 at 1992 DHS	1,234 (20%)	Ref (OR=1.000)			
Women aged 20-24 at 1998 DHS	1,372 (22%)	0.981	0.773	1.244	0.8735
Women aged 20-24 at 2006 DHS	1,676 (27%)	1.499	1.181	1.902	0.0009
Women aged 20-24 at 2012 DHS	1,968 (31%)	1.352	1.075	1.700	0.0009
Total	6,250 (100%)				

4. Conclusion

o Niger needs to put in place the necessary policies to *take advantage of its demographic potential*.

5. References

Ouedraogo, A. (2024). Using Total Cohort Fertility in Adolescence (TCFA) to analyse adolescent fertility trends and factors in Niger: Evidence from 1992 to 2012 demographic and health surveys. Afr JRH 28[2]: 13-30.

The results indicate a high level of adolescent fertility in Niger, which is a well-established and stable phenomenon influenced by factors such as early sexual intercourse and marriage, infant mortality and the desire for large families.