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# Cascade of Provider-Initiated HIV Testing and Counselling at specific life events (pregnancy, STIs, marriage) in Côte d'Ivoire.





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## Background

With a prevalence around 2,8%, **Côte d'Ivoire is one of the most HIV-affected country in West Africa**. Despite the implantation of Provider Initiated Testing and Counselling (PITC) in 2009, **PITC coverage remains low**. In this context, it is important to ensure that an HIV testing is at least routinely offered at specific relevant and recommended life events. Maintaining these screening opportunities are all the more crucial since only 54% of HIV-infected people knew their status in this country in 2017.

**The purpose of this study is to determine whether an HIV test was offered and performed at specific life events where PITC is recommended.** Four events recommended by both the Ivorian government and Ministry of Health were studied:

- Pregnancy, for women ; 
- Pregnancy of a partner, for men ; 
- Sexually Transmitted Infection (STI) episode ; 
- Marriage (recommended only by the Ivorian government). 

## Methods

A **cross-sectional telephone survey** was conducted in 2017 among a **representative sample of 3,867 adults from the general population** in Côte d'Ivoire. The occurrence of the following events over the past 5 years were documented: childbirth, STI episode and marriage. For each of these events, participant were asked :

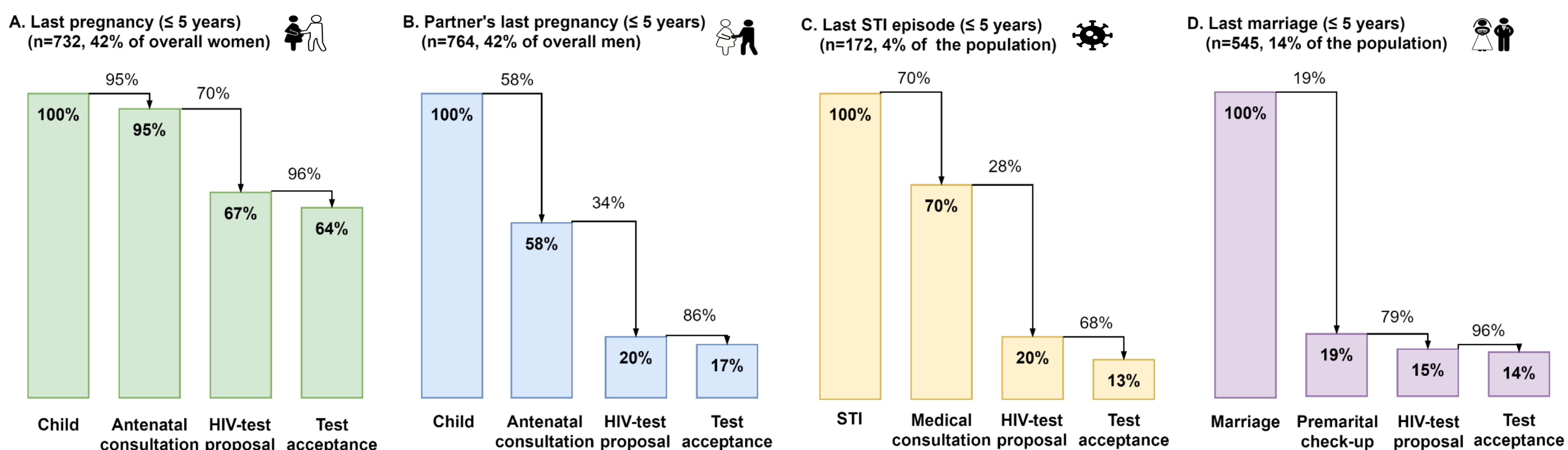
1. if they **consulted a healthcare professional** ;
2. if they **were offered an HIV test** during that consultation ;
3. if they **accepted the test proposal**.

These three steps constitute the "PITC cascade". The factors associated with each of these three steps were analyzed in separate logistic regression models stratified per type of event.

Factors measured in the logistic regression models included socio-demographic characteristics, media exposure, individual perceptions (e.g. perceived HIV exposure), individual resources (e.g. index of economic well-being, health insurance) and residence department.

## Results

While 64% of women were tested for HIV during their last pregnancy, only 17% of men were tested during their partner's last pregnancy and this proportion fell to 13% for people with an STI and 14% for people who got married (Figure 1). These levels of HIV testing are mainly driven by lack of medical consultation (except for pregnant women) and lack of testing proposal (except for premarital check-up). The testing acceptability rate was high.



**Figure 1. Consultation with a healthcare professional, HIV test proposal and acceptance during last pregnancy among women (a), partner's last pregnancy among men (b), following a STI episode (c) and on the occasion of a marriage (d), in the general adult population, Côte d'Ivoire, 2017 (n=3 867).**

Note: results are weighted and calibrated.

	Main factors associated with		
	consulting a health professional	being offered to test	test acceptance
<b>Antenatal (women)</b>	not working ++ living in Abidjan (vs. rural area) +	secondary education (vs, none) ++ Catholic (vs. Muslim) ++	knowing an HIV-infected relative ++
<b>Antenatal (men)</b>	no health insurance ++ living in urban area (vs. Abidjan) ++	24-35 years old (vs. under 24) + high index of economic well-being ++	none
<b>STI</b>	Women ++ ; 24-35 years old (vs. under 24) ++ being exposed to media ++	24-35 years old (vs. over 35) + Catholic (vs. Muslim) ++	none
<b>Marriage</b>	Catholic (vs. Muslim) ++ ; health insurance ++	over 35 years old (vs. 24-35) ++	none

++ : ORa >1 & p-value ≤ 0.05 ; + : ORa >1 & p-value ≤ 0.10

## Discussion/Conclusion

Regardless of the four events studied (pregnancy, STI episodes, marriage), the **test coverage was mainly dependent on access to healthcare professionals and HIV testing offer during consultations**. Improving testing coverage in these relevant situations will require improved access to healthcare services through better communication (especially for patients with STIs) and better accessibility to healthcare services. A systematic invitation by healthcare professionals to male partners to attend antenatal consultations is also recommended in order to stimulate their presence.

The **HIV testing proposal rate was very low**, especially among men present at antenatal consultations and among those consulting for an STI. Although higher (around 70%), the **proposal rate among pregnant women in antenatal care remains relatively low** when considering all the efforts to implement the prevention of mother-to-child transmission programs in Côte d'Ivoire over the last two decades.

**Increasing HIV testing coverage in Côte d'Ivoire requires (i) facilitating attendance to health services in case of STIs, marriage and partner's pregnancy and (ii) strengthening routine testing proposal on these occasions.**