

Socio-Demographic Profile of HIV-Positive Mothers under the B + Option Followed by Mother-To-Child Transmission Prevention Sites in Bangui City, Central African Republic

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Abstract

Introduction: According to the data of the mother-to-child transmission program with the B + option in 2015, only 28% of HIV-positive pregnant women benefited from an antiretroviral (ARV) intervention to reduce the risk of mother-to-child Transmission. The aim of this work was to study the demographic profile of HIV-positive mothers under the B + option in the sites of Bangui.

Material and Methods: This was a cross-sectional, retrospective, descriptive study, from January 1st to December 31, 2017 in five sites for the prevention of mother-to-child transmission in the city of Bangui in the Central African Republic. The study population consisted of all HIV-positive pregnant women followed under the B + option during the year 2017 and meeting the criteria defined during the period of our study.

Results: A total of 293 HIV-positive pregnant women have been identified. The average age was 30 years with extremes of 17 and 43 years. The 25 – 35 year-old pregnant women were the most affected, either 61%. The free unions were the most represented (44.4%) as well as the unemployed (57%). Women with primary and secondary levels were the most concerned, respectively 43.7% and 37.2%; 63.5% of mothers were diagnosed during pregnancy against 27.6% before pregnancy and 8.9% after childbirth.

Conclusion: HIV-positive pregnant women followed under option B + at sites in Bangui were relatively young with a low level of education. They were mostly in a free union and without a job.

Keywords: HIV-positive mothers; HIV; B+ option; epidemiological aspects; Bangui

Introduction

In 2013, the World Health Organization (WHO) recommended the use of triple antiretroviral (ART) therapy for all pregnant and breastfeeding women with HIV regardless of CD4 count or clinical stage (Option B +). This option, adopted by 22 countries, including 21 countries in West and Central Africa, has reduced the rate of mother-to-child transmission of HIV by 80% [1]. The Central African Republic (CAR) is one of the most HIV / AIDS-affected countries in the world with a prevalence of 4% among adults aged 15-49 years in 2017. The epidemic is of a generalized type and constitutes a major problem of public health and development in the country [2]. It is higher in urban areas (7.9%) than in rural areas (2.9%) for both women (10.3% vs. 3.7%) and men (4.8% vs 1.9%). On the other hand, young people (aged 15-24) in urban areas are more and more affected (4.4%) than those in rural areas (1.6%) [3]. The prevalence also varies between prefectures from one region to another ranging from 1.0% in Ouham in the north-west to 11.9% in Haut-Mbomou in the south-east. Despite the progress made in the country in terms of the availability of prevention of mother-to-child transmission (MCTP), MCTP services are only integrated in 47% of health facilities offering antenatal care (ANC) in the country. Since 2013, the national HIV program has adopted the B+ option protocol implemented in the 156 health facilities that offer MCTP. According to program data in 2015, only 28% of HIV-positive pregnant women received an antiretroviral intervention to reduce the risk of Mother-to-Child Transmission in the country [4]. The rate of mother-to-child transmission of HIV has not progressed towards elimination. The mother-to-child transmission rate remains high, 25% in 2012, 28% in 2013, 20% in 2014, 12% in 2016, and 6.2% in 2017. The aim of this work was to study the socio-demographic profile of HIV-positive mothers under B+ option in the Bangui sites in the Central African Republic.

Materials and Methods

This was a cross-sectional, retrospective, descriptive study from January 1st to December 31, 2017 in five MCTP sites in Bangui City, Central African Republic. The study population consisted of all HIV-positive pregnant women enrolled under the B + option in the course of 2017. The sample size consisted of all HIV-positive pregnant women under the B + option meeting the criteria defined during the period of our study. Have been included in the study, all complete records. Pregnant women under other options were excluded. The variables studied were

tracking sites, age, marital status, educational level, occupation, and timing of testing. The data were collected by pre-established questionnaires. They were entered using EpiData software and the statistical analyzes were performed on the EpiData Analysis software. On the ethical front, the data collection sheets were anonymous.

Results

A total of 293 HIV-positive pregnant women were enrolled under the B + option in the city of Bangui during the study period. Table 1 shows the distribution of women by location of follow-up (N = 293).

Sites	Number	%
Community Hospital	151	51,4
Health Center of Bedecombattant	74	25,2
Lakouanga Health Center Camp	31	10,4
Izamo Infirmary	18	6,1
Ouango Health Center	19	6,4
Total	293	100

Table 1: Distribution of pregnant women under option B + according to their place of follow-up (N = 293).

Table 2 shows the distribution of mothers by age group.

Tranche d'âge	Number	%
15 to 20 years	14	4,7
20 to 25 years	43	14,6
25 to 30 years	84	28,6
30 to 35 years	95	32,7
35 to 40 years	40	13,6
40 years and over	17	5,8
Total	293	100

Table 2: Distribution of mothers by age group.

The average age of the mothers was 30, with extremes ranging from 17 to 43 years old. The 25 to 35 age groups were the most represented (179, 61.3%). The distribution of patients by revealed that the unemployed 166 (56.6%) were more represented followed by traders 59 (20.1%) and students / students 36 (12.2%). The distribution of mothers by marital status showed: common-law unions (130 cases or 44.4%), single (93 cases or 31.7%), married (50 cases or 17.1%), divorced (17 cases or 5.8%), widows (3 cases ie 1%). The Distribution of women by level of education is shown on table II.

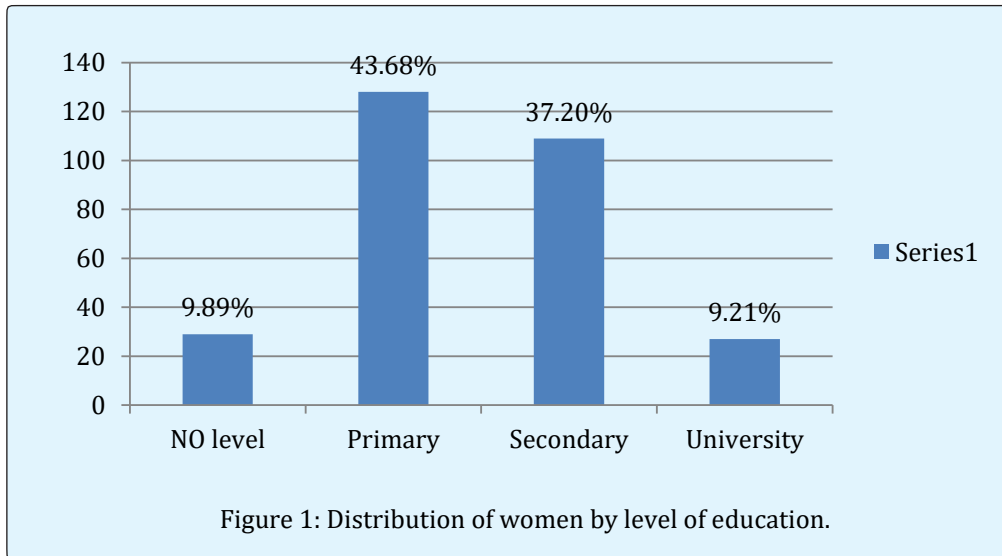


Figure 1: Distribution of women by level of education.

Of the 293 women surveyed, the majority had reached a primary level (128) or 43.7%. The distribution of mothers by time of screening is shown in Table 3.

Time of screening	Number	%
Before pregnancy	81	27,6
During pregnancy	186	63,5
Afeter delivery	26	8,9
Total	293	100

Table 3: Distribution of mothers by time of screening.

Approximately 186 (or 63.5%) of the mothers were screened during pregnancy, compared with 81 (27.6%) before pregnancy and 26 (8.9%) after delivery.

Discussion

Our work was aimed at studying the socio-demographic profile of HIV-positive pregnant women followed under B + option in health facilities in Bangui. It was retrospective and some patient informations were not available or misinformed in prenatal consultation records and MCTP files (parent contact information). In addition, the study focused only on five sites of 21 health facilities in the city of Bangui and the latest military-political events were an obstacle to data collection. All this can pose a problem of representativeness. However, our results are exploitable and could constitute our databases. The average age found during our study was 29.5 years. The most represented age group was 25-30 (43.7%). This average age was almost the same as that found by Sanon in Senegal [5] and by Rouafi in Mali [6]. The variation in

the average age from one country to another could be explained by the weight of culture and lifestyle on sexual behavior. In the Central African Republic, women enter sexual life early, as noted by Sépou, et al. [7] in a study on sexual parameters among central african women in urban areas. Several studies have shown that uneducated women have more health problems than those with a low level of education [6-9]. In fact, the poor understanding of the seriousness of the problems prevents women from making a decision to go to the health facilities as early as possible for prenatal consultation. In our study, the majority of mothers had a primary level followed by the secondary level as demonstrated by a study of the general population of Central Africa [8]. Compared to the time of screening, two-thirds of the mothers were screened during pregnancy. This result was comparable to that of Technau, et al. [10] in South Africa, Dainguy, et al. [11] in Abidjan, where the majority of patients were screened during pregnancy. In Mali, however, Fatoumata Younoussou Maiga [12] obtained respectively 86.1% before pregnancy, 11.2% during pregnancy, 2.7% after delivery and Traoré [13] also observed 60.9 % screening before pregnancy; 19.6% during pregnancy and 19.6% after delivery. The difference with Mali is that women screened more before pregnancy than during pregnancy. Screening is the gateway to prevention and care [14,15]. For example, mothers who were screened before or during pregnancy were privileged to benefit from interventions to reduce the risk of mother-to-child transmission of HIV. The sensitization campaigns and a better organization of the health care system might be the explanation in our series; and which fits well with the

national policy of prevention of mother-to-child transmission of HIV that is free and routine in all pregnant women. Mothers screened after delivery had a higher risk (RR = 0.06 [0.008-0.524], P = 0.001) of transmitting the HIV virus to their children in our series.

Conclusion

This work noted that the majority of HIV-positive pregnant women under B + option were in the 25-30 age group, had primary education and were screened during pregnancy. They were mostly in common-law unions and without a profession. Prospective inclusion of patients and interviews at the beginning of their care could help to limit the number of missing data. In addition, the health system will have to intensify the campaign of voluntary testing before pregnancy.

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