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Abandoned Children Admitted to the Nursery of Lome (Togo): Place of HIV/AIDS Infection

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Abstract

The authors conducted a case-control study of 102 children with positive HIV serology out of 956 received and screened at admission at Sainte Claire Nursery (SCN) in Lomé from 1st January 2000 to 31st December 2014 with the aim of to determine the social profile, the weight evolution and the fate of these children admitted in a difficult situation.

The characteristics of this study are as follows: the seroprevalence rate was 10.7%; nearly three out of four children with positive serology (76.5%) on admission had been abandoned and admitted later than those with negative serology (79% vs. 57%); orphans accounted for only 17% and 5% were children of mothers who had a psychiatric illness. Among HIV-positive children followed up to 18 months (73.5%), their serology was negative between 7 and 14 months. Nineteen (19) remained HIV positive at 18 months were HIV positive. All children with negative serology and abandoned on admission were adopted before the age of 1 year against 25% of children with positive serology. Three-quarters (75%) of adoptions in the group of HIV positive children at admission and abandoned were done in Togo vs. 40% of children with negative serology. Children with positive serology arrived late at the SCN and significantly beyond one month (43% vs. 21%, p<0.001) and they were more often abandoned. This assumes that HIV status may be one of the reasons for the abandonment of these children by parents.

Until there is sufficient evidence of the place of HIV in child abandonment, HIV/AIDS awareness campaigns should take into account data from this study especially in countries with high prevalence of HIV/AIDS.

Keywords: Abandonment of children; HIV infection; Nursery; Togo; Africa

Introduction

HIV/AIDS, a social and humanitarian phenomenon, represents an unprecedented challenge for humanity. In 2007, out of the 2.7 million new cases of HIV infections worldwide in adults, Sub-Saharan Africa accounted for more than half of the cases (1.9 million) and ¾ of the deaths in the world (1.5 million) [1]. In this region, where the average adult HIV prevalence is over 15%, two-thirds of people living with HIV (PLHIV) live, nearly 60% of who are women, compared with about 50% at the global level [1]. At the end of 2010, 3.4 million children under 15 years were estimated to be living with the virus globally [2].

In Togo in 2008, the prevalence of pregnant women was 3.4% and the number of orphan children or made vulnerable by HIV was 68000 (50000-91000) [3]. This high prevalence is often the source of confusion in families when parents are infected. The anguish of the latter drives them to attitudes of despair with sometimes attempted autolysis or infanticide or even abandonment of the new-born and young infants. The fate of the latter is really problematic since the methods of diagnosing HIV at their age [4-7] are not very available or financially inaccessible to the population.

Goal: The place of HIV/AIDS infection among children in nurseries is poorly documented in Togo and in the African region. This study seeks to determine the social profile, weight and fate of children with HIV-positive serology in the Sainte Claire Nursery of Lomé (SCN), which is the main institution in Lomé that welcomes abandoned children, orphans from birth or other difficult situations.

Patients and Methods

This is a retrospective analytical study (case-control study) covering the fifteen-year period from January 1st, 2000 to December 31st, 2014, at the SCN.

The Sainte Claire Nursery is a Christian institution created about sixty years ago which welcomes the greatest number of children in difficult situations in Lomé, and in Togo in general. It has a pediatrician, a psychologist, an administrative health officer, a dozen religious nurses, a social advocate and some twenty volunteer "moms". It receives monthly subsidies from the State.

Our methodology consisted in a review of the records of all children in care and positive HIV serology during the study period.

Children followed are those orphaned at birth, abandoned by their mothers and brought to the institution, or those whose mothers had psychiatric illnesses, and rarely those whose mothers were incarcerated and are therefore admitted by a court decision.

The ELISA serological tests confirmed by the Immuno-comb® were carried out in the microbiology laboratory of the Tokoin University Hospital Center and the National Institute of Hygiene of Lomé in Togo, both of which are national reference centers, according to WHO strategy II [4,5].

All children were fed with artificial milk [8-11]. They were weighed every month on the same date (the 15th of the month) throughout their stay.

We evaluated nutritional status according to the Gomez classification (weight/age) which threshold of less than two standard deviations from the WHO-NCHS (National Center for Health Statistics, CDC-Atlanta) reference median defines protein-energy malnutrition. The clinical course of the children was made on the basis of consultations and hospitalizations recorded.

Finally, the origin and the fate of the children after their stay in the institution were analyzed. A control group of the same size as our sample and of the same social origin was made up of HIV-negative children who were received at the same time, randomly assigned to one in three individuals. The data were analyzed using Epi-info version 6.04. The chi-square test was used to compare the percentages with a significance threshold of 5% ($p < 0.05$).

Results

Serological status

During this 15-year period, 956 children were admitted and tested for HIV, 102 of who had positive serology. They are divided into 72 children for the period 2000 to 2009 (7.2 children per year) and 30 children for the period 2010 to 2014 (6 children per year). To all these children a check-up was done every three months until the age of 18 months. The time to change the serology of children varied from 21 to 65 weeks. In 7.8% of the cases (8/102) this change took place between five

and six months against 73.5% (75/102) between seven and fourteen months. Finally, nineteen (19) children who remained HIV-positive at 18 months (18.6%) were actually infected with HIV, a prevalence of infection of (1.9%).

Medical aspects

Children with HIV-positive serology appeared to be more consulted than the control group (2.53 vs. 2.44 consultations per month), but the difference was not significant ($p = 0.202$). Similarly, 15% of children were admitted to the control group compared to 26% of children with positive serology, but the latter had a 5-fold increase in hospitalization (128 vs. 644, $p < 0.001$), the difference is significant (**Table 1**). All positive serologic children received Trimethoprim-Sulfamethoxazole at a dose of 6 mg/kg/day of Trimethoprim and 30 mg/kg/day Sulfamethoxazole. Antiviral treatments were initiated only after 18 months [4,3]. In Togo, since 17 November 2008, medicines for the treatment of AIDS (ARV) are free of charge at the treatment centers approved by the National Program for the Fight against AIDS [12]. Despite the treatment four children died during hospitalization in a table of septicemia and severe anemia on a ground of severe acute malnutrition before the age of 2 years.

Table 1: Comparative repartition of consultation and hospitalization of infants with positive HIV Serology and checking group

	Abandoned with positive serology		Abandoned with negative serology (checking group)		
	n=102	%	n=102	%	
Number of consultations/month	258	2,53	249	2,44	$p=0.202$
Number of hospitalization	27	26	16	15	
Number of total days of hospitalization	644		128		$p<0.001$

Social aspects

At the admission, orphans of mothers accounted for 49% (468/956), abandoned 43% (411/956) and others (mothers with psychiatric illness) 8% (77/956). At least three out of four children (78/102), or 76.5% with positive serology at admission, were abandoned, while orphans accounted for only 18.6% (19/102) and 4.9% (5/102) were of mother with a psychiatric illness). More HIV-positive children were admitted late and significantly after one month (52.4% vs. 21.4%), $p < 0.001$ (**Table 2**).

Table 2: Comparative repartition by age at admission of infants abandoning with positive HIV serology and checking group

Age at admission	Abandoned with positive serology	Abandoned with negative serology (checking group)	

	n=102	%	n=102	%	p<0.001
≤ 1 month	46	45.1	80	78.4	
1 to 3 months	21	20.6	22	21.6	
3 to 6 months	19	18.6	0	0	
>6 months	16	15.7	0	0	
Total	102	100	102	100	

All children with negative serology and abandoned at admission (100%) were adopted before the age of 1 year as compared to 24% of children with positive serology (25/102) after the age of 2 years. In total, 76.5% (78/102) of adoptions in the group of children with positive serology at admission and abandoned were in Togo compared with 40% of children with negative serology. All children orphaned by a mother or mother who had a psychiatric illness had returned to the family at different times according to their parents' wishes but no later than two years of age.

Of the 19 children infected, four had died before the age of 2 years in hospital; seven had returned home at the age of 2 years according to the operating principles of the nursery and eight in temporary placement.

Discussion

In Togo, as in most low-income countries, until 2009 only serological tests were available and performed in neonates even though they do not allow formal diagnosis of infection in children before 18 months [11,12]. Forty-two HIV-positive children at admission accounted for 7.3% of all children tested, while the actual prevalence rate was 1.3% (8/576). According to a national survey conducted in 2008, children with milk substitutes had the lowest rate of seropositivity 4.1% (n=295) while those with mixed diets had the highest rates of 33% (n=64) [3].

Introduced only in the last five years, the overall seropositivity to PCR of children under 18 months in Togo was 7% (n=2009) in 2012. Its optimum use is made difficult by the recurrent unavailability of reagents and the low income of the population in relation to its cost [13].

This rate of seropositivity observed at the SCN seems particularly weak compared to those found in the African region. This could be explained by the systematic implementation of the Prevention of Mother-to-Child Transmission (PMTCT) program of HIV infection in the country since 2002. PMTCT is one of the priority interventions in the fight against pandemic [13-16], and would also justify the gradual reduction of the seroprevalence observed. Indeed, HIV prevalence among pregnant women (12-49 years) in antenatal clinics in Togo has increased from 5.4% in 2001 to 4.8% in 2003 and 3.4% in 2008, remained stable until 2012 [3,13].

Overall, from 2001 to 2012, the number of new infections among children was declined by 52% worldwide [17]. In 2012, the number of HIV-positive pregnant women was 4 681 (3.3%),

the number of HIV-positive pregnant women receiving ARV prophylaxis was 2539 (74%) for option A (Zidovudine AZT at 14 SA), and 902 (26%) for option B (Zidovudine AZT+Lamivudine 3TC +Efavirenz EFV at 14 SA); the number of new-borns of HIV +mothers who received ARV prophylaxis were 3,140 (95%), (Nevirapine NVP single dose+Zidovudine AZT for 7 days) [13]. The prevalence of HIV in Togo according to the results of the EDST III study (Demographic and Health Survey in Togo) in 2014 is 2.5%. The population living with HIV is estimated at 108,934. The PLHIV (People living with HIV) are predominantly women. They represent 57.68% of PHAs; 5 494 of them were pregnant. HIV+children account for 17.63% [18,19].

On the other hand, nearly three out of four children (71.4%) had lost maternal antibodies between 7 and 14 months, when logically a second serological check should, in the absence of clinical manifestations, eliminate the possibility of maternal contamination-fetal [3,13].

The nutritional and social care of children was not discriminatory to PSC, hygiene measures were taken and applied to all children by all staff including support staff during the care, meals and games. Such a measure probably contributed to normal and harmonious weight growth of all children, including those who were actually infected, further demonstrating the preponderant role of nutrition and favorable social conditions in the care of these children [20,21]. The very high rate of seropositivity among abandoned children is all the more worrying that at admission there were a few more abandoned children (49%) than orphans (44%). These results lead us to hypothesize that one of the important reasons for abandoning children would be the known existence of HIV in mothers who would push them to get rid of their children whom they believed were condemned to the disease through ignorance.

Moreover, positive serologic children were late in the SCN after one month (52.4% vs. 21.4%, p<0.001). We also observed a very significant difference in HIV seropositivity of children admitted to admission before the age of three months between those admitted for "abandonment" and those for other reasons, respectively 69% and 100%. This may corroborate our hypothesis that knowledge of their serological status would help mothers to abandon their child, and this late, compared to the children in the control group.

Indeed, most of these HIV-positive mothers are alone, marginalized, without real family support. Some are drug addicts. Most of these mothers have serious difficulties in assuming daily life, sometimes with a precarious life (few or no resources, unhealthy housing, some do not have medical follow-up.) In most cases fathers and children are often stigmatized in their dwelling place, and the gesture of despair is the belated abandonment of children after a few weeks or months of hesitation.

For example, the stigma and rejection of children affected by HIV/AIDS is largely linked to people's ignorance about the disease. Some pandemic structures do not hesitate to question the media, which often reinforces the negative image of the disease [21,22].

Admission of HIV-positive children was delayed because of the requirements of serological testing. The Polymerase Chain Reaction (PCR) technique could have made it possible to make a more reliable and early screening of children and thus promote their adoption as soon as possible in order to better adapt them to their foster family. It should also enable children who are actually infected to receive ARV therapy as soon as possible according to the WHO protocol. Similarly, orphaned children returning to their relatives' families sometimes suffer stigma from their own parents [22-26].

Finally, eight temporary children are still seeking a foster home. When will they have a stable and secure home? For about 20 years that we follow the children at the SCN of Lomé, no child infected with HIV has ever been adopted. Other orphaned or abandoned childcare facilities in Togo to date only admit children with negative serology. Are they really condemned? It is therefore essential to strengthen the information, awareness and mobilization of families and communities on the HIV/AIDS pandemic and the vulnerability of children [22-26].

Conclusion

HIV infection appears to play an important role in the late abandonment of infants in our low-income settings. Widespread use of PCR in the detection of infection would allow the early adoption of these children in search of a foster home. Until there is sufficient documentation of the role of HIV in abandoning children, HIV/AIDS awareness campaigns should take into account the data from this study.

References

1. ONUSIDA/OMS (2014) Sub-Saharan Africa: Update on the AIDS epidemic Summaries by region 2008.
2. WHO, UNAIDS (2011) UNICEF: Global HIV/AIDS Response. Epidemic update and health sector progress towards universal access. Progress Report.
3. National Program for the Fight against AIDS and Communicable Infections (2008) Annual Activity Report-Sentinel Surveillance of HIV and Syphilis Among Pregnant Women in Togo.
4. WHO (2010) Recommendations on the diagnosis of HIV infection in infants and children.
5. WHO (2012) Service Delivery Approaches To HIV Testing And Counselling (HTC): A Strategic Htc Programme Framework.
6. WHO (2007) WHO case definitions of HIV for surveillance and revised clinical staging and immunological classification of HIV-related disease in adults and children.
7. Sherman GG, Cooper PA, Coovadia AH, Puren AJ, Jones SA, et al. (2005) Polymerase Chain Reaction for Diagnosis of Human Immunodeficiency Virus Infection in Infancy in Low Resource Settings. *Pediatr Infect Dis J* 24: 993-997.
8. WHO (2007) HIV transmission through breastfeeding.
9. Coutsooudis A, Pillay K, Kuhn L, Spooner, Elizabeth T, et al. (2001) Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS* 15: 379-387.
10. Coovadia H, Kindra G (2008) Breastfeeding to prevent HIV transmission in infants: balancing pros and cons. *Curr Opin Infect Dis* 21: 11-15.
11. Gandemer V (2000) L'infection à VIH de l'enfant. Institut Mère-Enfant, Annexe pédiatrique, Hôpital Sud. Rennes Cedex 2. Mars 1-10.
12. Kumphitak A (1999) Zidovudine to prevent mother-to-infant HIV transmission in developing countries: a view from Thailand. *Trop Med Int Health* 4: 236-237.
13. National Program for the Fight against AIDS and Communicable Infections PNLIS/IST (2012) Annual Activity Report-Sentinel Surveillance of HIV and Syphilis Among Pregnant Women in Togo.
14. Awiti PO, Grotta A, Van der KM, Dusabe J, Thorson A, et al. (2016) The effect of an interactive weekly mobile phone messaging on retention in prevention of mother to child transmission (PMTCT) of HIV program: study protocol for a randomized controlled trial (WELTEL PMTCT). *BMC Med Inform Decis Mak* 16: 86.
15. Woelk GB, Kieffer MP, Walker D, Mpofu D, Machekano R (2016) Project ACCLAIM Study Group. Evaluating the effectiveness of selected community-level interventions on key maternal, child health, and prevention of mother-to-child transmission of HIV outcomes in three countries (the ACCLAIM Project): a study protocol for a randomized controlled trial. *Trials* 17: 88.
16. Bajunirwe F, Tumwebaze F, Abongomera G, Akakimpa D, Kityo C, et al. (2016) Identification of gaps for implementation science in the HIV prevention, care and treatment cascade; a qualitative study in 19 districts in Uganda. *BMC Res Notes*. 9: 217.
17. MA, Schouten EJ, Wadonda KN, Kajawo E, Eliya M, et al. (2014) Evaluating the impact of prevention of mother-to-child transmission of HIV in Malawi through immunization clinic-based surveillance. *PLoS One* 9: e100741.
18. ONUSIDA (2013) Rapport ONUSIDA sur l'épidémie Mondiale du sida en 2013. Genève 106.
19. Togo (2015) Ministère de la Santé : EDST (Enquête Démographique et de Santé) 2014.
20. Kambale RM, Bwija KJ, Kivukuto MJ, Cubaka M L, Masumbuko BM, et al. (2016) Infectious profile and mortality of children aged 0-5 years admitted with severe acute malnutrition: a retrospective cohort study conducted in the Therapeutic Nutritional Center in Bukavu, Republic of Congo. *Pan Afr Med J* 23: 139.
21. Asafo Agyei SB, Antwi S, Nguah SB (2013) HIV infection in severely malnourished children in Kumasi, Ghana: a cross-sectional prospective study. *BMC Pediatrics* 13: 181.
22. Kouadio T (2015) Orphelins du Sida : Rongés par la maladie, abandonnés par la société. *fratmat info* 8: 43.
23. Rosset D, Dumaret A, Rebours Y (1991) HIV-infected babies live in a nursery. *Pediatr j Child Care* 7: 422-427.
24. Guillermet E, Zahi K, Gruénais ME Au Maroc (2015) des enfants inadoptables pour cause de VIH/sida ? *Humanitaire* [En ligne].
25. Thielman N, Otermann J, Whetten R, O Donnell K (2012) Correlates of Poor Health among Orphans and Abandoned Children in Less Wealthy Countries: The Importance of Caregiver Health. *PLoS ONE* 2012.
26. Whetten , Jan Ostermann J, Rachel A, Whetten B, Pence W, et al. (2009) A Comparison of the Wellbeing of Orphans and Abandoned Children Ages 6–12 in Institutional and Community-Based Care Settings in 5 Less Wealthy Nation. *PLoS One* 4: e8169.

