Closer is not better. Distance and proximity in the use of health care by women living with HIV and AIDS in Ouagadougou (Burkina Faso)

Le plus près n'est pas le mieux. Distance et proximité dans le recours aux soins des mères porteuses du VIH à Ouagadougou (Burkina Faso)

Aude Nikiema, Emmanuel Bonnet, Alix Tougma and Frédéric Le Marcis

Introduction

1 The transmission of HIV via breastfeeding represents one to two thirds of Mother-To-Child Transmission (MTCT) (Becquet et al. 2005) in Africa, and, according to the WHO (World Health Organization), there has been little change in these rates. Working on this variable, therefore, could appreciably reduce the number of infections in newborns (Bonvalet P., 2011). Consequently, actions taken for the Prevention of Mother-to-Child Transmission (PMTCT) began in the mid-1980s. There ensued, amongst other things, a certain number of recommendations, drawn up and revised regularly by the WHO, whose role it is to guide different countries' policies in their struggle against MTCT.

2 Several recommendations have followed on since then. The frequency of these recommendations demonstrates how difficult it is to implement an effective and appropriate programme capable of reducing this mode of transmission (Tougma, 2015). Producing a mixed study, associating geographers and anthropologists, focusing on the practice of safe exclusive breastfeeding by HIV-positive women in Ouagadougou (Burkina Faso)[1] gave us the opportunity to re-examine the notion of distance in access to health care facilities as a positive factor when monitoring the disease.

3 Three main findings underpin the fundamental principle of MTCT care. First, HIV is not transmitted from mother to child as long as the placenta is intact, second mother's milk

remains the main road for HIV transmission from mother to child and lastly Formula Feeding present greater risk for infant's health (such as diarrhea leading to death) than milk of a seropositive mother under prophilaxy (WHO 2009). Thus, in order to prevent transmission after delivery, the WHO recommends safe maternal breastfeeding. During the first 6 months following birth, the infant is breastfed exclusively while his/her mother receives antiretrovirals (ARVs). Food supplements are only introduced from the sixth month on.

4 Research has shown that stigmatization influences adherence to treatment and health care by HIV-infected mothers (Msellati, 2009; Tijou Traore et al., 2009; Florom-Smith and De Santis, 2012). In this context, maternal breastfeeding is regarded as a way to avoid stigmatization among populations where the social norm is to breastfeed one's child (Aishat et al, 2015; Al Mujtaba et al, 2016). Mothers are invited to bottle milk their infant only if the conditions of formula feeding are met[2], in accordance with the WHO AFASS recommandation (acceptable, feasible, affordable, sustainable and safe). Cultural factors are regarded as a barrier to safe exclusive breatfeeding. For example, when close relatives intervene in the care or feeding of the infant, it prevents many women from using exclusive breastfeeding (Mnyani et al, 2017; Odeny et al, 2016). Indeed, the mother is never the infant's sole caretaker (Desclaux and Alfieri, 2014). Any changes to the established order raise questions and interpretations. Outside the strict family environment, it could lead to her serological status being revealed (Mnyani, 2017). Women "maintain a distance from the actors of infant feeding in order to avoid the risk of being labelled as HIV-positive or as a bad mother." (Desclaux and Alfieri, 2010).

5 Yet in Africa, in terms of health care, distance is regarded as one of the main challenges to address. In order to improve attendance, health authorities have increased primary health care services in areas considered homogenous, both from a physical as well as a demographic point of view. Therefore, in Burkina Faso, all the entities considered as accessible are health care facilities in a health catchment area no greater than a radius that meets the metric standards set by the (WHO)[3]. This is based on a certainty: there is less use of services by people who live long distances away from them (Lucas-Gabrielli et al, 2001). As a consequence, proximity to health care has become a universal objective. Nevertheless, one should note that although physical distance is at the heart of public health facilities repartition, the association between access to care and physical distance is only verified in rural areas and not in urban ones (Lompo, 2013).

6 In Burkina Faso, the city was long excluded from the application of WHO norms regarding Health care physical distance. Nowadays the situation has evolved, and cities are included in the National Health Development Plan (PNDS 2001-2010). But following the research findings on minimal impact of distance in urban areas, this value now makes room for the notion of "population density" and the ability for patients to reach a facility is no longer seen as a criterion of attendance (Baker et al 2008, Perry and Gesler 2000).

7 As a matter of fact, considering the high concentration of services, physical accessibility cannot be employed as a determining factor in the use of health care entities (Guigliardo et al, 2004). The city is seen as a place where everything is accessible (Charreire and Combier, 2006), an observation made in different studies conducted in Bamako, Ouagadougou or towns in Bénin (Coulibaly et al 2008, Develay et al 1996, Doumbouya 2008). Authors show fast access, lack of a correlation between patient's residence and health care locus' choice or absence of physical distance in factors of non-attendance during a morbid episode.

8 In the capital, Ouagadougou, there is wide-ranging and available health care provided by both public and private sectors. But for the latter, the rationales for establishing medical centres conform to the rules of private medicine, which are sensitive to economic changes, professional competition, demographic density and accessibility (Baudet Michel, 2015). They are opposed to public rationales and their concerns for spatial dispersal that are dictated by development plans.

9 However, the populations' practice territories add another dimension to the areas planned by decision-makers or developed by the market. Indeed, the study of health care loci reveals an individual's ability to make choices (CIST 2014, Rémy et al 2011) which sometimes are incompatible with what could be expected and provide an expression of territories that are different from the administrative constructions underlying the distribution of facilities. Moreover, it shows the lack of interest shown towards the individual in the study of health care use and the different reasons for using services (Rémy et al, 2011).

10 The authorities have designed the sanitary area, a functional area, from a Euclidean point of view. In this design, there is a lack of geographic focus, where localities are overloaded with implications and meanings which lead to constraints and require resources (Pumain, Saint-Julien, 2010). Yet the geographical element is always a social one (Berger and Séchet, 2011). The sanitary area can become a cognitive space when it is designed by the population. It therefore depends on individual representations based on the perceptions and social content attached to the area. The metric element is dependent on the distance from the observer (Pumain and Saint-Julien, 2010).

11 Basing our thinking on the recognition of the constructed dimension of the sanitary area, we posit the hypothesis that in the city, in the case of PMTCT monitoring of HIV-positive mothers, distance has been reinvented. It is no longer overlooked or experienced as a hindrance to access but considered as a determining factor that motivates attendance at health facilities. The closeness of health care resources to the patient's home can indeed prove to be an unfavourable criterion to attendance (stigma) and distance a favourable determiner. Church et al. (2013) have discussed the differences in perceived status exposure across HIV and AIDS models of care (integrated or stand-alone). The authors show that stand-alone care structures are often more positively valued by patients. Indeed, they concentrate expertise and provide a space where hiding one's status is not necessary because each patient is HIV+. In the context of PMTCT monitoring, spatial practices of health care use by HIV positive women show differences from those of public policies. Our discussion aims at understanding which territory these health care practices are part of and what are the factors determining them. It pays specific attention to multiple meanings and values of distance between one's neighbourhood and health services dedicated to HIV.

Methodology

12 The area covered by this research is the whole of the Centre region of Burkina Faso and its capital Ouagadougou. This region hosts more than one third of the total active list of HIV patients in Burkina Faso, i.e. 31,572 out of 80,390 patients in 2015 (Ministère de la Santé, 2016: 263-264). Indeed, in this country, the female HIV prevalence is four times

higher in urban areas (2.6%) than in rural ones (0.7%)[4] (Institut National de la Statistique et de la Démographie (INSD) and ICF international 2012).

13 This administrative region presents a broad range of living environments which are likely to be the source of everyday behaviours and the potential cause of health inequity. In this region, urban areas occupy an ever-expanding and diverse space. In this respect, the old central districts, the principal beneficiaries of urban development policies over decades, stand out from the outlying planned districts of more recent construction, whose line of expansion is bounded by the unplanned districts, subject to customary law and consequently overlooked by urban planning documentation. Through housing development projects, districts that housed populations of a higher than average economic profile have been displaced into the city. These developments are usually small housing estates but sometimes cover even bigger areas, a showcase for modernity, like the Ouaga 2000 quarter.

14 The findings are based on surveys conducted on 30 HIV-positive women, who were pregnant or had recently given birth, in order to monitor their breastfeeding practices over the first six months of the infant's life. The sample selection was determined according to several strata. The first step focused on the health districts. There are five of them in the Centre region and their boundaries follow the administrative contours. The territory thus covers urban, periurban and rural areas of Burkina Faso's capital. The second step focused on the standard of community amenities based on health care facilities, chemists and markets. Geo-positioning of these amenities was available. The choice of these types of amenities was of twofold interest. Location and the density of these private establishments reflect both the economic dynamics of the area and the standard of living of their populations. Indeed, the requirement of a commercial strategy is to set up a facility in areas where there will be a larger potential clientele. Furthermore, these facilities are regularly used by women, the subject of our study, to meet their or their family's needs. Their location determines accessibility to them and is a one reason for using them.

15 Zoning was introduced according to five categories, from highly equipped districts with a diverse offer, to unplanned, poorly equipped zones. Therefore, populations living in the urban outskirts have been taken into account. They are often recent migrants who do not have the same kind of access to the city as the populations residing in the city centre. Furthermore, it has been shown that these populations do not travel long distances to be treated (Othingué, 2005) and that they resort more readily to self-medication, using products from the pharmaceutical industry (Nikiema, 2014). These choices lead one to suppose that HIV women who breastfeed use facilities that are closest to home for their PMTCT treatment.

16 Lastly, the classification identified the women according to their socio-economic level defined on the basis of individual amenities. These amenities are as follows: principal mode of access to running water, principal mode of lighting, principal mode of household waste disposal, possession of a bicycle. Educational attainment was also taken into account. These choices were underpinned by the hypothesis that one's standard of living has effects on behaviour and influences the loci attended. But also, that the choice of therapy varies in accordance with an individual's standard of education (Soura et *al.*, 2011). Some elements of women's profiles are illustrated in Table 1.

Table 1: Elements of female respondents' profile

Women's profile	Type	Nb
Matrimonial regime	Monogamous	25
	Polygamous	5
Age (average calculated on 28 women)		33
Educational level	None	16
	Primary	9
	Secondary	3
	Higher	2
Method of travel	None/spouse	2
	On foot	3
	Public transport	2
	Bicycle	11
	Motorcycle	10
	Car	2
Serological status known by spouse	No	8
	Yes	22
Place of residence	Planned	24
	Unplanned	6
Type of courtyard	Collective courtyard, family owned (the couple lives with other family members)	8
	Collective courtyard, one room rented within it (called celibatorium in Burkina Faso) (the couple lives with strangers)	12
	Individual (the couple lives on its own)	10
Total	Number of women of the survey	30

Source: Survey project ANRS 12316

17 From this stratification, a list of health facilities providing PMTCT monitoring was drawn up. Together with the help of health workers, it involved identifying the women entering the protocol: HIV-positive women who were pregnant or with an infant below the age of one month. Informed consent was obtained from the women to ensure their total adherence to the survey. Similarly, the protocol was submitted to the health ethics committee under the 2014-4-032 reference.

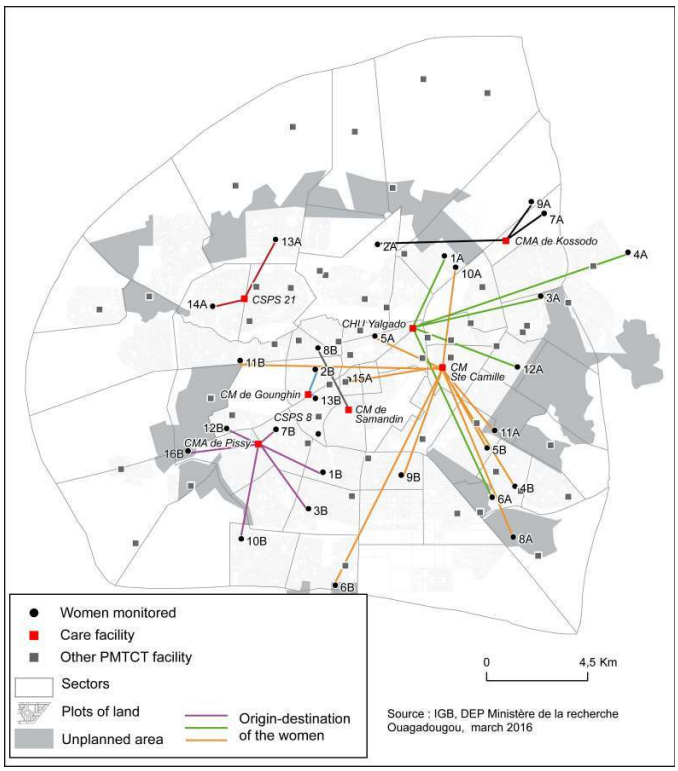
18 The data collected were of two distinct but complementary types: they were of both geographic and quantitative types (identification of socio-economic characteristics of the territories, description of flows via georeferencing (GPS) and transcription of the data in a Geographic Information System (GIS). They were also of ethnographic type (produced by observations and repeated interviews). Data acquisition was done jointly by means of a geographer and sociologist partnership.

19 Identification of the PMTCT monitoring area was done via a survey of the women monitored by us. The information was integrated into a database in which the place of residence of the women identified appeared according to a code. The calculation of distances from place of residence to health care, as the crow flies, was done with a Geographic Information System (ArcGIS) using the tool "near" and thanks to information supplied by the Platform of Geographic Information PIGEO[5] (Bonnet and Nikiema, 2013), for sharing geographic data on the town, in particular locating health care providers. In order to protect the women's anonymity, the monitoring protocol stipulated that only an identifier be used to map geographic phenomena, on a city-wide basis and with a symbol covering a wide surface area so as to prevent the possibility of locating the precise place of residence. The database and the geographic coordinates were stored on a computer to which only the researchers of the team had access.

Results

20 In the Centre region, there are 116 facilities providing a PMTCT monitoring service, including 62 located in urban areas. The majority of dwellings in the city's planned housing areas are situated, therefore, at an average distance of 1.3 km from a PMTCT clinic. If the distribution of provision imposes lengthy journeys on inhabitants from the peripheries of the town, this situation is reversed the further one enters the former planned housing districts. In our sample, the women are at a distance of 1.2 km as the crow flies from the closest PMTCT site. Yet the sites they say that they attend require an average journey of 4.2 km. This is a great distance given the hot, dry climate and the poor quality of traffic routes. Only five out of the 30 women monitored by the survey use the PMTCT site nearest to their place of residence. The planned or unplanned housing area is not a criterion of selection; only the centre-to-periphery geographic location plays a role in the sense that there are more providers in the central districts than in the undeveloped districts of the town. Furthermore, despite a greater relative closeness to medical centres situated in the rural part of the Centre region, the populations in the peripheries go to the more centrally located health care facilities (figure 1).

Figure 1: Health care loci attended for PMTCT monitoring



21 The respondents therefore travel distances almost four times greater than expected (table 2). The lowest value is 0.25 km and the highest 10.75 km as the crow flies. The median distance of 3.56 km, from place of residence to health care, shows an order of magnitude in the value gap identified by shorter than average distances, but they remain higher than expected. Consequently, 11 out of 30 women travel over 4.25 km to attend their PMTCT facility.

22 The methods of travel used provide the women with a certain freedom of movement. Some of them are restricted because of lack of transport. Six of them travel on foot or depend on their spouses to reach the health care facility. Nine of them travel by bicycle, two by public transport, 11 by motorcycle and two by car. The mode of travel is an indicator of the constraints of distance in a territory affected by intense heat which exacerbates the arduousness of the journey taken. Similarly, the kilometres covered seem low when compared with other environments. However, the routes taken are of poor quality, often dirt tracks with frequent potholes, just as on the maintained secondary asphalted roads, moreover, which increase travel time. It often takes over one hour to travel 4 km. Under-developed public transport systems mean it takes even longer to travel across the city given their low frequency.

Table 2: Distance from place of residence to reach a PMTCT site according to mode of travel

Mode of travel	Number of women	Average distance between residence and health care (km)	Median distance between residence and health care (km)

On foot or dependent on spouse	6	3.23	3.16
Bicycle or public transport	13	6.03	5.07
Motorcycle	10	3.10	3.04
Car[6]	2		

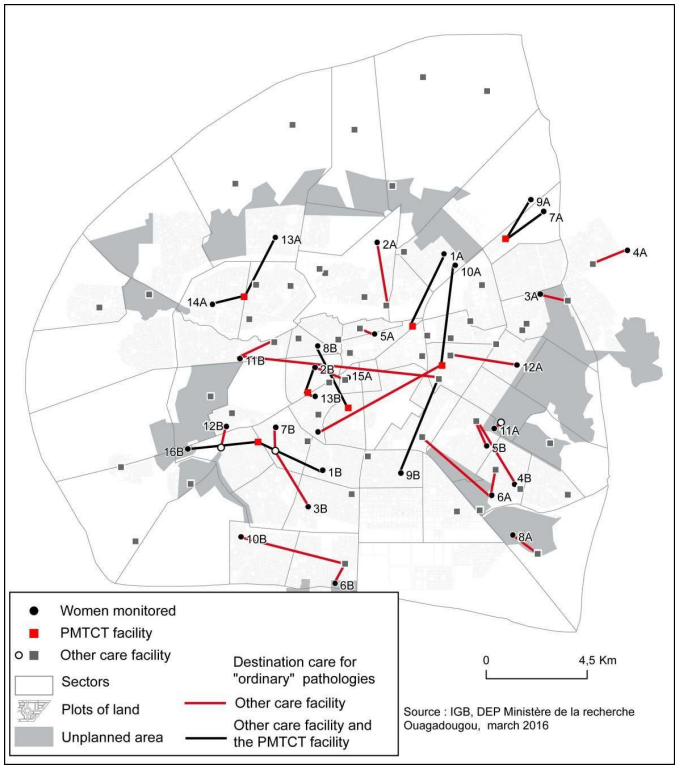
Source: Survey project ANRS 12316

23 Table 2 does not show an increase in the length of journeys proportional to the speed of transportation modes or linked to women's autonomy (table 2). The longest distances travelled by the women on bicycles are not justified by specific factors and do not originate in a particular place of residence. Whatever the method of travel, the facility attended is not chosen according to its closeness to the place of residence. This table of distances demonstrates the effort made to reach the health care centre and the ordeal experienced to escape stigmatization. Indeed, mobility generates fatigue not only through physical effort but also because of climatic conditions which are often difficult. The maximum average annual temperature of the capital was 35.9°C in 2015, with a high of 40.9°C in May (INSD, 2015). Moreover, these journeys subject women and their infants to the risk of an accident and very high atmospheric pollution in a country where vehicles are, on average, over 15 years old, according to UEMOA, and are not subjected to an anti-pollution test (Yelkouni and Kafando, 2007).

24 There are seven health care facilities attended by the respondents. They are reference facilities, medical centres or hospitals, with the exception of a single site, an emergency care facility, the Centre de santé et de promotion sociale (CSPS – Health and Social Development Centre) of sector 21. They are state-run facilities, except for the Saint Camille medical centre, a private religious establishment run by Catholic priests. They mirror the image of facilities in the urban part of the Centre region since merely eight out of 62 belong to the private sector. However, 74% of PMTCT care is provided in emergency care facilities.

25 There are different reasons for choosing which monitoring locus to attend. Against all expectations, six women cite proximity, even though they do not actually attend the closest facility. Among them, four have shared their serology with their husbands. A mere four women in our sample actually attend the PMTCT health care facility closest to their place of residence but they also cite the fear of being stigmatized at each visit. This sole reason is given by six of the respondents. The fear of coming across an acquaintance who could reveal her serology to the family circle is often mentioned. The confidence, recommendations from health workers, lower cost (health care at social cost, food or pharmaceutical aid) are the other reasons cited (six, five and three women respectively).

Figure 2: Health care loci attended for “ordinary” pathologies



26 Concerning “ordinary” pathologies, with no direct link to HIV Aids, surveys show other destinations. Therefore, 20 out of 30 women attend a single medical centre for their care regarding these health issues. For 11 of them, this health care centre is their PMTCT locus. The others attend health facilities that are much closer to their home (compared with the PMTCT site) by travelling an average distance of 1.14 Km compared with an average of 5.45 km for the PMTCT site. Among the respondents, ten women attend several health centres for pathologies with no link to HIV.

27 These behaviours were observed through the prism of four criteria:

- Age
- Seropositivity known or unknown by spouse
- District’s type: planned or unplanned
- Courtyard’s type: celibatorium, family, individual.

28 Based on these criteria, Table 3 shows on the one hand, the average distances as the crow flies travelled to receive PMTCT care and, on the other hand, the difference in kilometres between choosen PMTCT sites and the health facilities visited for regular care, each observed in relation to the place of residence.

Table 3 : Average and median distances travelled to the place of consultation according to women's profiles.

Women's profile	Type	Distance to visited PMTCT site (km)		Distance to the closest PMTCT site (km)		Difference in distances PMTCT site/ regular care site (km)	
		Average	Median	Average	Median	Average	Median
Age	< 30 ans	4,8	4,5	1,1	1,2	3,4	2,6
	30-35 ans	5,1	4,4	0,9	0,9	3,1	2,4
	>= 35 ans	3	3	1,6	1,7	0,8	0
Serological status known by spouse	No	3,5	3,1	1,2	1	1,8	0,3
	Yes	4,5	4	1,2	1,2	2,4	0,9
Place of residence	Planned	4,1	3,8	1,1	1,1	1,9	0,5
	Unplanned	4,9	3,3	1,4	1,3	3,3	1,7
Type of courtyard	Collective, celibatorium	4,2	3,9	0,9	0,8	2,4	1,8
	Collective, family courtyard	4,1	3,7	0,9	0,9	2,4	1,7
	Individual	4,4	3,5	1,6	1,5	1,8	0

Source: Survey project ANRS 12316

29 For PMTCT sites visited by women, variation in the distances travelled with regards to categories remains low and does not always go in the expected direction. This is the case for the "Serological status known by spouse" category. Women whose spouses are informed travel a greater distance (4.5 km) on average than the other category (3.5 km). Only age-specific observation shows more pronounced disparities between categories. Thus, on average, women over 35 years of age travel shorter distances (3 km) to reach the chosen PMTCT site than women under 30 years of age (4.8 km). Two hypotheses can be put forward: older women are well aware of the availability of care or they seek to limit their travel time because of their workload. The available means of travel cannot justify this difference since cycling is used by half of the group of women surveyed under 30 and over 35 years of age. In any case, the place of residence, type of courtyard or serology known or unknown to the spouse cannot be used as the main factors to justify choosing a PMTCT care location or to explain the search for anonymity.

30 The calculation of distance differences between women and the chosen PMTCT care site and the regular care site shows the same trends. The age categories show a decrease in the distance differential with the increase in the age of the respondents. However, the gap between the averages of planned and unplanned neighbourhoods is widening. It can be assumed that health care provision in peripheric areas does not always provide PMTCT care or that care in these sites is judged to be of poorer quality. This is confirmed by the comparaison of the distance from the PMTCT care facility closest to the home: the distance is 1.4 km in unplanned areas compare to 1.1 km in planned ones. As a consequence, access to the PMTCT facility chosen means that women travel an additional 3.5 km in an unplanned area compared to 3 km in a planned area, which is not very different. The search for anonymity therefore does not seem to be more pronounced in a specific part of the city. The quality of the service offered, associated with its distance from the place of residence (in a search for anonymity) are the only selection criteria regardless of the profile of the women surveyed.

Discussion

31 Picheral (2001) considers that access to health care is ″the material ability to have access to health care resources and health services; there are at least two dimensions: material and social". Approached generally through the distance from place of residence to health care site and thus its closeness, it is presented as an indicator of social inequality. For many authors, it depends on health service provision and is understood as ″the ability of patients, at the opportune moment, to obtain the necessary care and medication for treatment by a medical professional″ (Commeyras and Ndo, 2006).

32 But accessibility is also context specific (Berger and Séchet, 2011). It should be defined according to the object analysed (Liu and Zhu, 2004). The relationship between the distance from place of residence to health care site and the disease can be observed through the context of temporary and organized proximity, defined by Rallet and Torre (2004). Developed in an economic approach for the requirements of the analysis of relationships established between enterprises, the concept makes it possible to gain a better understanding of the mechanisms implemented during consultation, in the framework of PMTCT monitoring.

33 According to Torre (2009), ″geographic closeness is neutral in its essence. It is the human actions and perceptions that give it a positive or negative dimension and lend it a certain utility. It is the manner in which the actors appropriate it that is important″. It does not translate, therefore, as physical proximity and short distances but as an interplay of relationships and confidence established between parties.

34 In the case of women engaged in PMTCT in Ougadougou, long-distance travel for health care, far from being experienced as a simple constraint (financial or fatigue-related), appears to contain a positive value. It ensures anonymity and has advantages in terms of care. In this context, and by taking up the concepts of either chosen or subjected proximity (Torre, 2009), it is possible to qualify the long distances travelled as a chosen rather than an enforced distancing since, despite the close vicinity of specific health care facilities, the women in most cases decide to distance themselves from their homes for their care.

35 The evolution in health policies, provision of care and recommendations make it necessary to reconsider the patient, his or her relationship with the disease and changes in behaviour. Undergoing treatment follows on from a doctor's prescription and the patient's commitment to comply with what is expected of her. If she respects the procedure, she is therefore considered as *"compliant"* (Benoist, 2016), a concept developed by Parsons (1951). Freeing themselves from the constraints of distance would be for HIV positive mothers the requisite to satisfactorily playing their role as patients. The long distances from place of residence to health care site are a resource that the women use to respond to the demands of PMTCT treatment: "they respond to the demands of both the burdens of illness and the burdens of treatment, and the ways these resources interact with health care utilization" (May, 2014). But the frequency and regularity of mobility could also be analysed from a geographic point of view and be compared to the attainment of a productive activity. It therefore rests on an "organized proximity" (Torre, 2009), a notion determined by the rationales of belonging, linked to the relationships established between actors, implying connectivity and interaction. Organized proximity occurs as the factor triggering the choice of locus of care. It highlights the intensity of relationships established with the facilities, it takes into consideration the organization and not the territory. This aspect has been observed in the reasons for choosing the locus of care that were given by the women (reference, stigmatization, unfamiliarity, free, confidence in the staff, etc.). Woman 8A states: *"I usually go by bus and it costs 300 francs, but when I don't have the money for the bus, I go on foot. I leave the house at 5.00 am and get to Sainte-Camille at 8.00. It's not a long way. I go to treat all my illnesses and it's free"*. Woman 5A explains: *"a lot of people go to Sainte-Camille for lots of reasons. You can meet people you know but that's not a problem and for me, it's not a problem"*.

36 The quality of services provided, and the relationships formed between staff and patient are determining criteria. Woman 2B: *"I have a good relationship with the health care worker looking after me. If I'm at all worried, I hurry to the maternity to get advice. And when she phones me and wants to see me, I go there straightaway (...) I get a lot of support from the lady and even when people have donated things for women, she often keeps some for me. I always make sure I ask her for advice if I've got a problem."*

37 The position in the medical hierarchy, medical centres in the case of PMTCT care, seems to constitute another favourable factor thanks to the types of treatment available and the profile of the staff. Woman 1A says: *"when I fell pregnant and as it was the first time, I preferred to go to Yalgado"* (referral health centre, teaching hospital). Harang (2007) shows, in her study on the appeal of health care facilities in Ouagadougou, that the primary health care facilities (of the type Centre for Care and Social Promotion managed by a nurse) operate as community-based care. Only facilities located in a central sector supply a wider catchment area, in conjunction with daily mobility, comparable to that of medical centres, which, by definition, are run by doctors. "The catchment area continues to be determined by the level of care, the medical speciality, status (private, state or faith-based), the structure of care, the qualification of the medical staff, and the reason for attending..." (Harang, 2007). The distribution of health care provision can also explain the destination flows. Travelling to private referral health care centres (clinics) for PMTCT care seems to be towards the city centre. The private health sector is set up to meet profitability criteria, central districts are better equipped, the choice for locating a clinic often favours the high-volume traffic arteries (Harang, 2007). "Ordinary" health care is

based on basic public health provision, which is more widely spread out throughout the region.

38 But our findings show that accessibility and the drawing power of health care centres are not fundamental criteria in the choice of facilities providing PMTCT care. The choice depends above all on arbitration that the women carry out of their own free will for a service they consider essential. Woman 7B envisages changing her health care centre, *″ first I wanted to go to Rahimi next to my house, but I was afraid someone might see me there, so I want to go to the Samadin medical centre or to Sainte-Camille. Distance is no problem because I've got a CFAO motorbike to get there″*. Those people who are ″mindful of their health" use health care facilities that are further away than those people who do not attach the same importance to it (Othingué, 2005).

39 Apart from the quality of PMTCT care provided in medical centres, the hypothesis that a high attendance in these facilities allows patients to go unnoticed during a consultation could be put forward. This would justify the role the city plays in changes of behaviour (Vallée et al, 2006) and would make it possible to understand the reasons why it was impossible, in our sample, to record women living in a rural environment, even if it it is worth mentioning that the women are not drawn to health care provision in the rural environment. Indeed, these facilities often have a lack of products (shortages in reagents or medicines) and the rare cases treated make it difficult for the medical staff to develop their skills. After the first test, the women are generally referred to urban facilities. Acceptance of PMTCT is important. It was estimated at 85.7% in 2014 (CNLS-IST, 2016).

40 The fact remains that stigmatization is an obvious factor in choosing to travel long distances for the sake of maintaining anonymity. Territoriality resulting from the mobility of people living with HIV should be sought elsewhere than in the search for therapeutic care according to the spatial distribution of health care provision (Nikiema, 2008). Woman 10A points out: *"I didn't want to be treated at Somgandé because it's near my house and someone could recognize me (....) I'm scared about what people will think of me if they find out that I'm HIV positive"*. In Benin, Houeto's study (2005) on the coordinated health care programme for patients suffering from epilepsy, a disease often associated with supernatural phenomena, mentions the long distances covered from place of residence to health care site in order to avoid being observed by the neighbours. In northern countries, these choices have also been observed. Consequently, the characteristics and experience in the treatment of haemophiliacs *″shapes the supposedly rational reasoning of the search for the shortest way to the treatment locus″* (Berger and Séchet, 2011). The authors mention the idea of an *″irrational use″*, also put forward by Goodman et al (1997). They attribute this distortion to *″the inadequacy between the populations' needs and the service provided″*. However, it is difficult to restrict oneself to this sole finding in the case of pathologies affected by strong social exclusion. Nikiema (2008) underlined the concept of the founder of the WHO's Global Programme on AIDS, for whom the final phase in the fight against the epidemic, affected by discrimination and stigmatization, should focus on social, cultural, economic and political responses to HIV. The reasons for choosing loci for PMTCT treatment and monitoring thus demonstrate the major influence of non-spatial factors, such as age, social class, level of education, as well as more cultural considerations (Luo and Whang, 2003) during the health care programme of the patient and the treatment of her disease. They reposition the questions of health on the fine scale of the individual (Fleuret and Séchet, 2004). These considerations are difficult for health care stakeholders in African countries to account for because there is no real link

between intimate space and the political scene (Lévy, 1993). PMTCT monitoring practices illustrate the contradictions between health care policies, formalized by spatial distribution subjected to physical rationalities, and women's perception in the face of their disease.

41 The health care loci attended for pathologies not directly linked to HIV reflect the importance of the cognitive component and awareness of the disease since there is a gap between the uses linked to HIV and those designed to treat pathologies from other spheres. The short distances travelled, the health care sites attended are close to one's place of residence and show practices affected by the households' living standards and the available provision (Harang 2007, Nikiema et al 2011, Diaz Olvera et al, 2011). In Ouagadougou, the nearest facilities constitute the principal health care sites. They are chosen by other determiners such as the availability of funds and the mode of travel. New therapeutic territories are emerging.

Conclusion

42 Health is the expression of territorial practices and configurations. In urban areas, research studies consider that physical distance is not a key issue when considering access to care. However, monitoring HIV positive women in Ouagadougou and the simple study of the context in which they practise their health care show that it has become a decisive criterion in the use of bio-medical provision. Therefore, the specificity of the disease more than the economic level, social status or the ability to travel constitutes a basic deciding factor and runs counter to the health care expected by focusing on distance. Cognitive factors linked to understanding the disease and the practice of treatment cause patients to make long journeys, which challenge the expected pattern.

43 In Ouagadougou, PMTCT care falls specifically within the urban territory. Consequently, women travel long distances for access to treatment. They explain that this enables them to handle the risks of stigmatization. The distance, in this case geographic, is an adjustment variable in the face of this risk. Furthermore, the distance from place of residence to health care also arises from the choice of a service that they consider to be of better quality (milk, examinations, quality of interaction with the medical staff, free care). Distance, here seen by the political authorities as a form of remoteness, is eliminated. It is seen by HIV positive women as ″organized proximity".

44 Finally, distance and standard of living, particularly in urban peripheries, the sources of serious inequalities regarding health, must be reconsidered in the light of the relationship HIV-positive women have with the distance to PMTCT care. This relationship produces an unexpected use of health care facilities, the true measure of which has not yet been taken by the political authorities. However, beyond HIV/AIDS, these behaviours reflect the interest expressed in the quality of medical care. They also emphasize the role played by social factors when using health care and indicate the need for a local approach to health where the elected representatives of territorial authorities, by improving the quality of the built, social or economic environment, constitute favourable leverage to health. This approach, promoted in northern countries, is as of yet absent from African countries.

45 The desire of mothers to reduce any risk of transmission shows that the attention paid to their infant's health becomes the criterion of arbitration in the choice of a health care

locus to which access is not permitted. Those people who are ″mindful of their health" use health care facilities that are further away than people who do not attach the same importance to it (Othingué, 2005).

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NOTES

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2. These conditions concern mainly financial means to buy formula milk, access to clean water, and family context allowing or not bottle feeding.
3. Set at 10 km during the 1990s, the average radius of access to a primary health care facility has been set at 5km by the WHO today.
4. For men the HIV seroprevalence is 1.4% in urban areas and 0.5% in rural ones.
5. The pilot project PIGO was extended to all cities in Burkina Faso and the platform renamed PIGEO.
6. The average and median distances were not calculated, given their low numbers.

ABSTRACTS

The particular concern of HIV health care policies is with the transmission of the virus from mother to infant, from delivery until cessation of breastfeeding. PMTCT care seeks to help women reduce the risk by providing suitable services. In Burkina Faso, the authorities have chosen to bring health care facilities physically closer to HIV-positive women by increasing provision and thereby reducing the distance of access to them. Our purpose is to define the area in which these health care practices take place and the factors that determine them. 30 women

were monitored for this study, from pregnancy until the infant reached six months of age, in Ouagadougou, the capital of Burkina Faso. The results show the women's active involvement in attending PMTCT services. They travel long distances in a difficult physical environment, often using precarious means of transport. But the relationship between the distances from place of residence and health care is unexpected. The observations are at variance with research studies which show that the distance from health care facilities is not a criterion of attendance. While urban studies present distance as a neutral factor in the context of the use of care health services, our research shows distance as a criterion for attendance. Regardless the means of transport used, women travel long distances for PMTCT follow-up, as opposed to usual care.

La politique de santé en matière de VIH attache un intérêt particulier à la transmission du virus entre la mère et l'enfant depuis l'accouchement jusqu'au terme de l'allaitement. Les soins de PTME (Prévention de la Transmission du VIH de la Mère à l'Enfant) ont pour vocation d'aider la femme à réduire ce risque en offrant des services adaptés. Au Burkina Faso, les autorités multiplient l'offre de soin du VIH afin de réduire les distances entre établissements de soins et femmes porteuses du VIH. Cet article vise à définir le territoire dans lequel s'inscrivent ces pratiques de soins et quels sont les facteurs qui les déterminent ? L'étude menée à Ouagadougou (Burkina Faso) repose sur le suivi de 30 femmes fréquentant un service de PTME, depuis leur grossesse jusqu'au 6e mois de leur enfant, Ces femmes s'engagent avec application dans le suivi des visites médicales. Elles parcourent de longues distances dans un contexte physique difficile et avec des moyens de transport souvent précaires. Mais la relation entre distances parcourues et soins est inattendue. Alors que les études urbaines présentent la distance comme un facteur neutre dans le cadre de l'utilisation des structures de soins, nos travaux montrent l'éloignement comme un critère de fréquentation. Peu importe le moyen de déplacement, les femmes parcourent de longues distances pour le suivi PTME, contrairement aux soins ordinaires.

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AUTHORS

AUDE NIKIEMA

Institut des Sciences des Sociétés (INSS/CNRST), Burkina Faso, maître de recherche, nikiaude@yahoo.fr

EMMANUEL BONNET

IRD, UMI Résiliences, chargé de recherche HDR, France, emmanuel.bonnet@ird.fr

ALIX TOUGMA

Université de Rouen, France, doctorante, alixtougma@yahoo.fr

FRÉDÉRIC LE MARCIS

ENS de Lyon & TransVIHMI, Université de Montpellier/INSERM/IRD, France, professeur, frederic.lemarcis@ens-lyon.fr