

## “You need someone in a grand boubou” – barriers and means to access ARTs in West Africa

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### Abstract

Many francophone West African countries rank as low resource states, and are dependent on donor nations and remittances from migrants working abroad. Their health system is in a less favourable state and basic health care is not accessible for all its citizens, and in particular, private clinics offer highly specialized services such as assisted reproductive technologies (ARTs) for infertility care. Drawing from my research on ARTs particularly in Mali but also including Senegal and Togo, I will specifically outline the contextual barriers for African actors, both patients and professionals, to gain access to ARTs in the public or private health sector and mechanisms they have developed to cope with them.

**Key-words:** Assisted reproductive technologies, ART, barriers, infertility private health sector, West Africa.

Assisted reproductive technologies (ARTs) are cost-intensive treatments to cope with infertility. In global health and developmental arenas, medical and social science literature, the question to support the application of ARTs, in order to make them more available in developing countries, triggers ethical discussions in which mainly overpopulation and scarce public health resources are brought forward (Pennings et al., 2009; Ombelet, 2008; Schuster and Hörst, 2006; Daar and Merali, 2002). Yet ARTs have already travelled successfully to many sub-Saharan African contexts, including West African states, for instance Togo, Senegal and Mali. These onsets of ARTs in West Africa are, with the exception of Nigeria (Giwa-Osagie, 2002), mainly organised by providers in the private health care sector.

While money is for many sub-Saharan clinicians and couples the most drastic barrier, there are others to consider too. In this article I will outline the obstacles West African gynaecologists and involuntary childless couples struggle with on their journey to access ARTs and embed these strategies within African health contexts. I argue that for any activities to improve infertility care and the availability of ARTs

in sub-Saharan Africa, the private health sector and private providers are crucial cooperation partners.

My description and analysis is based on data resulting from social anthropological fieldwork (altogether 15 months) on infertility and ARTs conducted between 2004 and 2011 mainly in Mali (Bamako), but also in Senegal (Dakar) and Togo (Lome). In Mali I particularly accompanied the process to establish and provide ARTs in one private clinic through non-participant observation (in consultation and all stages of treatments). During these years, data were gathered via participant observation in two public clinics as well as in other private gynaecological clinics. Informal and formal narrative, semi-structured interviews with directors, doctors and health staff were conducted in all these sites. I also focused on life histories and patients' (18 women and men and seven couples) experiences with ARTs (retrospective, prospective and concomitant) through following up visits and interviews sometimes covering seven years, recruited in and beyond the clinics. Four focus group interviews with (21) non-afflicted men and women from various social milieus were carried out, while interviews with

and visits to non-biomedical practitioners (hunters, marabouts, individual and organised phytotherapists and Imams) were also conducted. I also carried out interviews with Islamic religious leaders from different subgroups in Mali as well as interviews with state health institutions and the National Ethics Council. While in Dakar (Senegal) I conducted (informal) interviews with two gynaecologists from two different private clinics and with one laboratory director, in Lomé (Togo) I carried out a one week stay of fieldwork in a private fertility clinic where I also interviewed five of the clinic's patients. In terms of education, occupation, property and affluence the majority of the interviewees can roughly be grouped as members of the middle or lower upper class. In 2009 I attended the founding conference of the GIE-RAF (Francophone African Fertility Society) in Lomé, where I talked with and listened to the presentations of many gynaecologists engaged with ARTs in various francophone African countries (Hörbst, 2009). During all these years I also spoke with anyone available (waiters, acquaintances, taxi drivers, market sellers, neighbours etc.) about the issue of infertility, its social handling and their attitude toward ARTs.

### **Mali: a health care system in crisis**

For roughly a decade (until very recently) the Islamic oriented Mali was considered one of the solid and promising democracies on the African continent, which triggered an increasing flow of developmental aid from developed countries, while Libya and Arab countries supported the government as well. International philanthropic agencies and non-governmental organisations finance numerous projects and offer solid working places for many educated Malians. Bamako, the capital of Mali, became one of the “booming” cities in West Africa. In this process, the gap between poor and rich opened up tremendously and became literally more and more visible in the streets of Bamako. As in many other West African countries, a growing middle class with access to higher education and financial means is emerging, and the urban population is becoming increasingly fragmented in terms of economic and social power.

Concerning social order, various frames of orientation (following respectively Malian ‘traditional’ values, Western style, Muslim and Christian behaviour and morale) offer a messy variety of world views and rules of social practices in terms of family, gender relations, business activities, religion and health care. In day-to-day practice, most people draw on bits and pieces from these different frames of orientation and, according to specific social situations and social fields of activity, can enact what appear to be

contradicting values in social interactions by applying an intersecting mix of styles.

Embedded in these complex processes, the Malian state still remains in a rather weak economic position. With a gross domestic product estimated to be about USD 10.29 billion USD in 2011, Mali is recognized as a low-income nation. The gross national income per capita figures between USD 691 and USD 1100 according to different sources (WHO, 2009; Deutsches Auswärtiges Amt, 2012). The Malian state and its investments in the health arena (as in other areas) depend heavily on funding by international development cooperation and by philanthropic donor agencies. In 2009 the total expenditure of the Malian GDP on health was 5.6% (WHO, 2009), while in 2005 external resources already financed 25.6% of the national health sector (WHO, 2007). These aspects suggest a rather high political influence of international donors concerning questions of which investments, plans and strategies are followed in the public health sector.

However, the public health care sectors of many West African countries – including Mali – are in a state of structural crisis due to several factors which include bad management and failed structural adjustment programs implemented by IWF and the World Bank in the 1980s, which triggered a general monetisation and liberalisation of public health care institutions, where patients have to pay for treatment (Jaffré and Olivier de Sardan, 2003; van Dijk and Dekker, 2010). As in other West African cities, the public health sector is characterised to a high degree by various forms of corruption. Patients are often asked to pay under-the-desk fees besides the officially fixed amounts for receiving care. Medical staff in public institutions is paid quite badly and often not regularly. Working morality, motivation and commitment of health personal to provide quality of care is often constrained (Jaffré, 2012; Jaffré and Olivier de Sardan, 2003). While this situation is pervaded by financial shortages it is also combined with local working management and organisation arranged upon hierarchical values of social organisations that additionally build barriers to smooth team cooperation. These aspects inherent within those health systems create a certain “local moral economy”, due to health staff's own precarious living situation, where “personal survival” has to be secured in a difficult socio-economic context (Jaffré, 2012). Many patients utilizing public hospitals suffer from arrogant behaviour by health staff who often ignore patients altogether and suffer from highly unreliable treatment arrangements with often poor outcomes. This unhealthy configuration seems to result in what a young Bamakonian taxi-driver nicely brings to the point:

People don't trust doctors [*in public institutions*]... because you are not dealt with the way you would like to be. If you don't have acquaintances in the hospital, they don't even look at you. Or you have to bring someone along in a *grand boubou*.

As a "grand boubou" is the wearing of Malian traditional clothing for important social events and demonstrates high socio-economic status, this metaphor underlines that some one is needed who, at least, enjoys a high reputation, who has the necessary relations to important health staff in the hierarchy and has money in order to receive (good) care (Jaffré, 2012). "With the private clinics", the taxi driver continued

...this is different, that is the reason why nowadays all over the city private clinics and small private doctors' offices are mushrooming. They treat you nicely, they are friendly with you, they help you, and they examine and medicate you. They know you will pay... Even if you actually cannot afford them, you go there.

This explanation mirrors a tendency, characteristic of many West African hospitals (Jaffré and Olivier de Sardan, 2003) and specific consequences of it: health care in public hospitals suffers from a bad image within the population, while a trend emerges for those who are economically stable to show preference for accessing health care from the private sector. As underlined by the taxi driver, also less affluent Malians try to gather resources in order to receive treatment in private institutions. This dynamic is fuelled by the fact that in recent years graduates from Malian medical, pharmaceutical and/or nursing schools cannot always enter the public sector, as the Malian state does not have enough resources to employ them. In order to make their living, they try to position themselves within the private market.

Simultaneously, a brain drain from public services to better paid positions in the private commercial and non-commercial sector is taking place. As in other sub-Saharan countries, in Mali tasks expected of the public health system are partially taken over by the private sector including NGOs, private-public-partnerships, religious institutions and private clinics, and medical and nurses offices. This non-public environment for health care seems to further strain the situation in public hospitals and to contribute to their increasing malfunction.

This complex scenario complicates access to provisions for ARTs in public hospitals in Mali. Coupled with the national low-resource budget allocations for the public health sector, and the above mentioned often dysfunctional social and organisational working management, all together these factors seem to play a further adverse role for implementing ARTs within the public health domain. As

in many developing countries (Inhorn, 2002), infertility and ARTs are not a priority to the Malian state nor to the international developmental aid arena; as argued elsewhere, no money flows or funding strategies from the global donor community include health issues associated with fertility problems. (Hörbst and Wolf, 2007).

### Obstacles for providing ARTs

Upon analysis of interviews with private health care providers from francophone West Africa, investment barriers in the private sector are found to be quite similar to those in the public one: prominent economical obstacles are evident, as lab equipment and tools are expensive. To embark on such an adventure is, in case of failure, associated with a risk of no profitability and of high (private) encumbrance, including the potential for social and professional ostracisation. Adding to those challenges is the fact that knowledge and skills concerning ARTs have to be acquired from outside the country. Thus, gynaecologists face a lack of knowledge, skills and experience concerning the different steps (hormonal stimulation and monitoring, harvesting of ova, fertilization in lab, transfer etc.) required for assisted reproductive interventions. In addition, they are confronted with a scarcity of trained professionals in order to assemble a team, which includes lab assistants, embryologists and nurses. To successfully manage these challenges, beyond access to theoretical literature and guidelines available online, gynaecologists are in need of international contacts to ART specialists and embryologists, through which they may acquire and improve skills through training from internships. If they want to provide ART treatments, they also must deal with the fixed equipment needs: they have to find out what and where to purchase basic "hard ware" they need for providing ARTs (such as microscopes, micro-injector, incubator, intake pumps, harvesting needles, lab fluids etc.). Linked to this are further challenges: for instance, lab fluids have to be imported; they are taxed, and thus can often become more expensive than in European countries. Short expiration dates on expendable items add further problems, and cost-effectiveness (for clinics and patients) will depend on how many couples' cycles can be covered by one bottle of fluid before it expires.

Additionally, in the local health system context, as noted by different Malian providers, a sharing of leading responsibilities and an efficient cooperation among private health care providers are not common practice. Such forms of cooperation, gynaecologists repeatedly explained to me, are often mistrusted by actors due to a very hierarchical and tutorial

distribution of dependency and responsibility in terms of work, money and blame, and as such sharing of investments are not easily feasible (comp. Giwa-Osagie, 2002). Thus motivation for teamwork cooperation has to be developed and organised, and has, as the Malian ART provider told me, to be constantly nurtured, for instance through regularly increasing salaries and/or by some sort of share holding.

At the same time, in many West African countries, there is no stable policy existing concerning laws and regulations on ART practices. In Mali, the National Ethics Council has debated ARTs and handed a (rather restrict) proposal excluding the use of donor gametes over to the Ministry of Health. However, until 2011 no laws or regulations were enacted. This legal uncertainty of whether and which variants of ARTs will finally be accepted, creates an ambivalent situation for the clinicians interested in ARTs: on the one hand, this legal lacuna allows physicians a professional liberty for practising all variants of ARTs according to what they consider is (biomedical or sociocultural) necessary for success in fertility treatment; on the other hand, this lack of legal clarity disrupts their private investments as future regulations might prohibit some treatments or variants (for which they already have invested).

In the Malian public health sector, according to my data, current budgets and working configurations hardly allow for acquiring the cost intensive technical equipment (as it is problematic to buy second-hand devices in the public sphere) and render it difficult to acquire personal with the specific skills needed for providing comprehensive ARTs or to train them to develop those skills. Further on, without a working nation-wide health insurance system, granting access to ART through the public sector for non-affluent people would cause the Malian state to also face the challenge of organising a funding scheme. Given this context, it comes as no surprise that a professor who had dreamed since 2005 of providing ARTs in the Bamakonian University Hospital, and had contacted NGOs and professional acquaintances in France, has yet to realise his dream.

### Private providers' ways to cope with challenges

While struggling and navigating step-by-step with these challenges and their specific situational shape, on their journey to provide ARTs locally in different West African cities, several 'models' were pragmatically developed by gynaecologists and biologists, which can be roughly clustered into three different types.

In the Togolese case, a North-South start-up partnership eased the way to put ARTs to work. The

gynaecologist and director of a private clinic explained to me that he entered in a partnership with a French ART specialist. In the beginning, himself and an embryologist received extra training in France, while local training in Lomé was organised for laboratory assistants and nurses. While the Togolese team conducted the hormonal stimulation, harvesting of ova and fertilization, the French specialist and a team regularly travelled to the clinic, in order to carry out embryo transfers until the Togolese gynaecologist was able to successfully perform this key step in the IVF procedure (Hörbst, 2012b). The French team's travel and accommodation expenses were fully covered by the Togolese clinic. Similar proceedings for putting ARTs to work were developed in Cameroon, Cote d'Ivoire and Burkina Faso (<sup>1</sup>).

In Dakar, the capital city of Senegal, in 2007 a different model was developed: a local director of a laboratory for biomedical analysis started a split-off or "outsourced" lab service for the fertilisation of gametes. He provides the full lab equipment and skills for IVF and ICSI and offers the fertilisation process (including cryopreservation) to various gynaecologists from different private clinics. The gynaecologists carry out the hormonal stimulation and harvesting of ova in their clinics, while the gametes are then brought to the lab where the fertilisation of ova and sperm is processed. The embryo transfer procedure is done by the gynaecologist within special rooms of the laboratory. This model reduces cost for the gynaecologists, who do not need to buy laboratory equipment and maintain a skilled laboratory team, etc. With specific funding arrangements, this model could also allow for the provision of ART treatment in public clinics (<sup>2</sup>).

In the Malian case, a rather "South-bottom-up" procedure emerged in different phases. In the beginning, the clinic director employed a biologist who trained and managed two members of the lab team himself. To keep investments low he (mainly) bought second hand equipment to start insemination and IVF, but not ICSI. At the same time he enlarged and enacted his already existing transnational professional networks in order to arrange for training internships for him and the biologist in several clinics abroad. While in 2007 they had success with

<sup>1</sup> The last statement is drawn from personal communications and oral presentations at the GIERAF conference in Lomé, February 2009. In Uganda a similar model was developed, see Platteau et al. 2008.

<sup>2</sup> The statements here are a brief summary from an interview with the director held in 2007 when visiting the laboratory and are also drawn from the director's presentation at the GIERAF conference in Lomé, February 2009.



inseminations, their efforts with IVF still proceed to fail. They attempted to overcome this situation by trying to receive additional (technical and financial) support from a Dutch NGO, but it was unfortunately in vain. The Malian gynaecologist then extended the application of insemination for cases that, according to European standards, would have recommended IVF and/or ICSI. With recommendations by French specialists, he simultaneously started to treat younger women with less complicated case histories and to also offer donor oocyte cycles from a sister or cousin for IVF in older women. He became a founding member of the francophone African fertility association at its first conference in 2009, which resulted in obtaining helpful information for improving his activities and triggered a dynamic optimism. On this basis, the biologist and gynaecologist decided to risk new private investments. Entering in a business partnership, they asked for a high bank loan, with which they purchased new lab equipment, which included the micromanipulators required for ICSI. Further on, anonymous gamete donors were found and utilized in donor cycles, and in 2010 the first babies after IVF and ICSI were born in Mali. An increase in patients and cycles carried out was noticeable in 2011 and cryopreservation is in the planning <sup>(3)</sup>.

### Patients coping with obstacles

While many Malians have heard at least rumours about so-called “test-tube” babies, most of them have only superficial information on the different care options that can be summarized under ARTs. In my research, the majority of involuntary couples had spent thousands of euros on repeated conventional biomedical treatments with various specialists (public and private), before they had begun an ART cycle. My data suggest that this practice is triggered to a certain degree by gynaecologists’ recommendations and by a certain denial to refer women to colleagues; it also intersects with patients having a rather individual-related trust in specific doctors’ skills than in the biomedical techniques applied, along with a desperate “hope against hope” for success before moving on to another provider.

This behaviour also relates to a lack of resources, as for the majority of Malians a treatment with ART is hardly or not at all financially feasible. Even in cases of couples from the more affluent middle or higher economic strata, as in my research sample, there are situational shortages particularly based on the priority of other family members’ demands such as school fees, marriages, other health treatments and investments necessary for business affairs etc. The more powerful and economically successful a Malian family is, the more obligations they have

towards relatives and clients. Moreover, with a majority of Malians belonging to Islam, social solutions such as marrying a second wife or fostering other children to realize a child wish are acceptable; and, many extended families have reservations against spending huge amounts on ARTs. However, for many involuntary childless couples, particularly for women, ART treatments are more attractive: if successful, they allow women to become pregnant, and visible pregnancy can suffice as a means to overcome the social stigmatization and exclusion of infertility (Hörbst, 2012b).

In general, these financial barriers are easier to deal with, if the women earn money themselves. Employments can also be used for organising bank credits. Income from informal female saving circles can be very helpful, as much as substantial contributions made by elder sisters or brothers living and earning abroad (Hörbst, 2012b). This is of particular importance in cases where husbands already have children with another wife and/or if female factor infertility is diagnosed. If the husband has no children and/or male factor infertility is diagnosed, husbands seem to be more inclined to pool the money for ARTs. But these tendencies are highly dependent on frames of orientation and education, on individual understanding of marriage and partner relationships, as well as the duration and persistence of the problem, while also a distinction between generations is notable from my data.

Furthermore, some men in my study were suspicious about a diagnosis that would refer to them as being infertile, causing them to go for additional opinions. Some men did not accept an infertility diagnosis at all, as in the Malian public narrative women are usually accused of being the cause of infertility in a marriage (Hörbst, 2012a). Additional issues, surfaced: while some men feared the mistaken identity of ova or sperm in the lab, several couples expressed reservations against African clinics offering ARTs in general, but in contrast showed a high trust in the ‘technical/scientific superiority’ of European clinics (particularly following failures with local ART treatments).

<sup>3</sup> After having reshaped the fertility centre, according to the Malian clinic, they have lifted the prices of an IVF cycle from approximated 150 euro. In 2010, the cost for insemination was nearly 400 euro, with a discount for three attempts it is about 900 euro. A single IVF attempt costs around 1300 euro, with a package solution buying two attempts in advance it will be roughly 2300 euro. ICSI costs 1900 euro, with a package solution it will be around 3100 euro. Depending on the specific situation, around 1000 to 1700 euro have to be added to each attempt for hormonal stimulation, monitoring and ultrasounds.

In the process to put ARTs to work in Mali, clinics (along with other West African ones) responded to patients' financial and local socio-cultural barriers to undergo ARTs. On the one side, the gynaecologist provides some monitoring treatment (ultrasound) for free, or gives discounts in cases where couples have unsuccessfully attempted ART cycles several times. The clinic also can offer a "package solution" with reasonable discounts if three inseminations or two IVF/ICSI cycles are purchased at the beginning <sup>(4)</sup>. On the other side, multiple (up to four) embryo transfers are provided, as the gynaecologist explained to me, in order to heighten chances for success and to save money.

While money is for many Malians the most significant obstacle, there are socio-religious obstacles that can be, for some, easier to tackle. Some men in my research distrusted the treatments completely, as the gynaecologist's work appears to be untraceable or unverifiable. One main question was: "Do they do anything at all?" To calm those fears, the Malian clinic started to show the couples the main steps done in the lab. They made sperm visible via a computer screen before and after treatment, they showed them the embryos before the transfer and explained, based upon visualization techniques, on embryo quality and the decisions made about which embryos to transfer.

As Islamic views in Mali prohibit the use of donor gametes, rejection of donor gamete cycles is often expressed. However, some infertile women and men (including religiously committed ones) in my study accepted donor cycles, by handling the religious question rather pragmatically. Their argument was, "I do not harm anyone, so Allah will forgive me", and therefore they consider this act a private decision that they have to resolve with Allah only. In some cases, where women fear their husbands might be reluctant to use donor ova, the women explained to me that they simply conceal this aspect from their husbands and, as long as the husband does not ask, as the gynaecologist told me, the clinic does not tell him either. In the case of donor sperm, the same procedure is applied concerning the wife. Moreover, the clinic allows men to collect sperm at home – an instance that also enables men to clandestinely bring, for instance, a brother's sperm for ART procedures (Hörbst, 2012b).

## Conclusion

The interest and demand for ARTs is increasingly matched by the development of private institutions catering to this need in increasingly more West African countries. The sub-Saharan specialists and teams engaging in ARTs have developed several

models to put ARTs to work. Due to these efforts, ARTs have become locally accessible and, in consequence, also more easily affordable for the more affluent francophone African upper and middle class couples suffering from involuntary childlessness. The teams providing ARTs have appropriated some of the current prevailing international standards (such as single embryo transfer, low dose protocols, transparency between partners) to specific local socio-cultural configurations: they are aware of different relations between the married partners and thus provide consultations with one partner only and allow for the concealing of information between partners. Many cycles are multiple embryo transfers, and, as gynaecologists and/or patients from Mali, Togo, Senegal and Cote D'Ivoire expressed, they are rather positively evaluated as a mean to heighten chances and save the patient's money. However, private clinics have already implemented structures and have successfully organised teams for efficient cooperation in providing successfully ART treatments to their patients although they have appropriated some standards to local social and economic configurations. Looking at the huge and multiple factor problems of public health institutions, these private actors seem important partners to engage with in order to implement new or to improve treatments for infertility with ARTs. As these private clinicians and embryologists have developed strong networks and experience, and have risked investments often of their private money, they should not be overlooked but actively involved in future activities to provide more affordable ARTs which would be more feasible and thus accessible for a larger number of involuntary childless couples in francophone West Africa.

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<sup>4</sup> If the first cycle of treatment is successful, the couple can come, for instance, one year later for another attempt, or they can transfer the right to a further attempt to another couple. In Togo similar package solutions are offered.

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