Governing reproduction in post-revolutionary Tunisia: contraception, abortion and infertility

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ABSTRACT Following a neo-Malthusian rationality, the Tunisian independent state has promoted biomedical contraception and legalized abortion to lower the national fertility rate. Whereas for 40 years non-reproduction has been the objective of official demographic policies, IVF private clinics are a flourishing industry. In this article, I explore the contradictory effects of (non-)reproductive biomedical technologies by showing how they contribute to the non-reproduction of certain categories of citizens and force others to reproduce.

KEYWORDS: Tunisia, abortion, assisted reproductive technologies, contraception, forced reproduction, non-reproduction.

ABSTRACT Suivant une logique néomalthusienne, l'État tunisien indépendant a promu la planification familiale et légalisé l'avortement afin de baisser le taux de natalité national. Bien que pendant 40 ans éviter la procréation ait été le principal objectif des politiques démographiques du pays, les cliniques d'AMP constituent aujourd'hui une industrie florissante. Dans cet article, j'explore les effets contradictoires des technologies biomédicales (non-)procréative analysant la manière dont elles contribuent à l'absence de procréation chez certaines catégories de citoyens et à la procréation forcée chez d'autres.

MOTS CLÉS : Tunisie, avortement, contraception, non-procréation, procréation forcée, procréation médicalement assistée

Media teaser: I argue that in Tunisia the revolution of 2011 has had contradictory effects on women's possibility to choose if and when to reproduce.

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In Spring 2014, I attended a training seminar designed for healthcare providers working in public sexual and reproductive (SR) health clinics that was organized by a Tunisian NGO active in SR rights. During the seminar, a medical doctor said that, although in the early 2000s government authorities had organized several trainings for health professionals to inform

them about recently introduced official protocols for medical abortion (Hajri 2004), later on, they stopped offering them. According to her, local authorities had ceased paying attention to SR health in the public sector since at least 2008. Moreover, she argued that the decline of the medical authorities' political, economic, and social commitments to this domain had been evident since the late 1990s. An experienced midwife working in the public health sector added that between 2008 and 2009, "there had been a decision to stop or at least reduce abortions performed at government facilities because birth rates were very low" (4 April 2014). One of the trainers at the seminar vigorously replied that "it was not possible for state officials to take a political decision about the reproductive and sexual rights of women" as they were protected by the law.

This short excerpt of a much longer discussion hints at two decades of change in the Tunisian state's demographic policies that have brought about the reduction of SR health services for women attending government clinics. In the mid-1960s, Tunisia was one of the first Arab states to implement a family planning policy (Ben Dridi and Maffi 2018), which, together with several social and economic reforms (Gastineau and Sandron 2000), contributed to transforming the local population's reproductive habits. The total Tunisian fertility rate dropped from 7.2 in 1966 to 2.4 in 1997 (Gastineau 2012), and in 2018 it was 2.17 (Insitut National de la Statistique 2020), showing a further decline. The demographic transition that took place in the late 1990s marked the end of the post-colonial state's aggressive birth control policies that forced many women to use contraception or even to be sterilized (Association tunisienne des femmes démocrates 2011). These policies, adopted after independence (in 1956), were in accordance with a neo-Malthusian rationality and aimed at fostering the socioeconomic development of Tunisian society. Legalizing contraception and abortion took place in the framework of family planning policies, rather than as a result of women's struggles. When in the mid-1990s the state's pressure on women to limit the number of children decreased, various factors led to severe cuts in the public sector,[1] including the healthcare system (Cassarino 1999): in particular, the structural reforms promoted by the International Monetary Fund and the World Bank since the 1980s (Dimassi and Zaïem 1996)

and the commercial agreements with the European Union in the late 1990s. The 2008 economic crisis and the revolution of 2011 gave the coup de grace to the state coffers. Regional hospitals, especially in the southern and western regions, were understaffed and equipment and medicines were lacking by the late 1990s. A gynecologist with whom I regularly collaborated during fieldwork, told me that in the 1990s in the hospital of Kasserine (a city at the border with Algeria) the only medication he could administer to his patients was paracetamol because the hospital's pharmacy did not have any other drug. Although the shortage of contraceptive methods and the decrease of abortion existed before the revolution, under Ben Ali's regime (1987-2011), the cuts in public health services were silenced. The democratization of Tunisia after 2011 elicited the emergence of already existing problems that became more acute due to the decade-long economic crisis.

Whereas the growth of the population had been an important concern for the Tunisian state for over 40 years, after 2011 the country's low fertility rate and the financial difficulties were the main reasons why the new democratic state neglected SR services, as they were not a priority anymore, and the healthcare system overall was in a dire situation. Many members of the feminist *Association tunisienne des femmes démocrates* expressed concern for the diminution of public SR services and its impact on women's rights because they considered it as a political act of the Islamist government that had come to power in October 2011. Their interpretation was related to the stance of the main Islamist party, Ennahdha, whose representatives questioned the right to abortion in the name of the right to life of the fetus (Maffi 2017). During the Constituent Assembly discussions, Ennahdha further proposed to inscribe in the new constitution the complementarity between women and men (Gray 2014). According to the article's text (that eventually was not passed): "The state protects the woman's acquired rights according to the principle of complementarity with the man within the family and as a partner of the man for the development of the homeland" (Boitiaux 2012). This threat to women's "acquired rights," which were sanctioned in the Code of Personal Status (1956), caused several demonstrations and sit-ins organized by feminist associations and other actors of civil society. Although the preoccupations of progressive groups for

preserving women's rights were justified, some secular feminists working in the health sector considered the cutting of public SR services as a result of the state's financial crisis, rather than a deliberate attack against women (interview with a feminist clinician, April 2014).

Drawing on two ethnographic research projects that took place in post-revolutionary Tunisia, I discuss in this article the transformations of state policies toward women's reproductive conduct, and how they have affected their lives, as well as the effects of the rapid emergence of the assisted reproductive technologies (ARTs) industry. The two research projects show that ARTs can have contradictory effects according to the conditions in which they are used and the access women (and men) have to them. I argue that they can contribute to the non-reproduction of certain categories of citizens and force reproduction among some others, according to state biopolitics, ideological repertoires, social norms, and political economy of health. Changes over time can make (non-)reproductive technologies accessible or inaccessible to different categories of actors at different moments. I first examine how the Ennahda's electoral victory, the circulation of conservative Islamic opinions, patriarchal social norms, neoliberal economic reforms, and the financial crisis have contributed to limit women's access to contraception and abortion in government healthcare facilities. Especially after the revolution, for many Tunisian women who cannot afford to resort to private clinics, contraceptive and abortion itineraries have become an obstacle course (Hajri et al. 2015). Class, age, marital status, education, and geographic location affect their access to SR services and stratify non-reproduction (Ginsburg and Rapp 1995). Whereas until the 1990s contraception and abortion had been used as coercive instruments to lower the Tunisian fertility rate, today they have become a scarce resource that only women living in urban areas and/or well-off women can easily access in the private sector and in some public facilities. In the last part of the article, I explore the private in vitro fertilization (IVF) clinics in Tunisia that have flourished over the last decade and some aspects of the lives of infertile couples. The privatization of the local IVF industry and the development of reproductive travels from North and West Africa limit poor, infertile Tunisian couples' access to ARTs. Putting together the two research projects – one on abortion and the other on the ART industry – I identify

three groups of women who each contribute to non-reproduction: those who "should not" reproduce, those who do not want to reproduce, and those who cannot reproduce. I maintain that similar class-related and spatial logics intertwine and determine specific forms of non-reproductive governance that shape women's reproductive practices, representations, discourses, and reproductive outcomes.

Methodology

The first period of fieldwork took place over 10 months (August 2013–June 2014) in the mainly urban area of Great Tunis, which includes four governorates out of twenty-four. I completed participant observation in three government reproductive and sexual health clinics and in the family planning unit of a large public hospital. These medical facilities were among the few that, despite some temporary interruptions and discontinuation of surgical abortion in two of them, continued to offer abortion services in the years after the revolution. I attended consultations about contraception and abortion and followed the abortion itineraries of married and unmarried women. I met dozens of women several times in one or more facilities during a medical abortion trajectory that needs two weeks to be completed from the first visit to the post-abortion checkup. I also took part in 15 workshops and seminars organized by three local NGOs defending women's rights about contraception, abortion, pregnancy, menopause, and infertility. Although I formally interviewed numerous doctors, nurses, midwives, and activists, the bulk of my ethnographic material originates from daily immersion in the field and the informal conversations I attended or took part in at the clinics, the hospital, and sometimes private homes. I did not interview women seeking contraception and abortion care systematically, but I attended their conversations in waiting rooms and during consultations. I obtained permission to conduct research in the clinics and the hospital by the National Office of the Family and Population and the Tunisian Ministry of Health, respectively. The Faculty of Social and Political Sciences of the University of Lausanne also approved the research project.

The last part of the article on the development of Tunisian ARTs industry is based on a pilot research project "Cross-border Reproductive Care in the Maghreb: An Emerging Reproscape?" which was conducted between 2018 and 2019. This focused on cross-border reproductive care in North Africa and mapped the circulation of infertile couples in this

region and between Francophone Africa and Tunisia. A team of seven researchers explored various aspects of the circulation of biomedical technologies, clinicians, and infertile couples as actors of a new reproscape (Inhorn 2011) in which Tunisia occupies a central location. I draw on interviews with patients, health professionals, representatives of the pharmaceutical industry and medical tourism agencies, analysis of online forums and websites, as well as ethnographic fieldwork in two infertility clinics in the cities of Tunis and Sfax. The majority of the findings in this article are the result of my own research, but some insight comes from other members of the team.[2] The private sector in Tunisia is only formally under the authority of the Ministry of Health, and so it was necessary to negotiate permission to conduct fieldwork and interviews directly with the private clinics, health professionals, and couples involved. To be able to conduct research within IVF clinics, the team chose to adhere to the model of "ethnographic consent" which implies a constant negotiation between the researcher and her interlocutors according to the principle of ethical responsibility rather than a formal agreement (Fassin 2008:129).

Seeking contraception or abortion care in the public sector

Until the mid-1990s the aim of reproductive governance (Morgan and Roberts 2012) in Tunisia was to lower the natality rate. International support for family planning (Paulet and Gachem 2001) stopped when the demographic transition took place at the end of the 1990s, and the neoliberal economic reforms imposed first by the International Monetary Fund and the World Bank and, later, by the European Union, led to a severe reduction of public services including in SR health. For instance, mobile teams from the *Office national de la famille et de la population* (ONFP), which over the course of several decades had offered reproductive and sexual health services in peripheral rural areas where there were no hospitals or clinics, were closed due to lack of funding (Gueddana 2001). For many women living in zones located far away from the main urban centers and roads, it was impossible to access contraceptive or abortion services as they could not afford to travel to the nearest city and stay there for several days.

Medical abortion is the most used method in ONFP clinics (*Avortement médicamenteux: 15 ans d'innovation au service de la femme en Tunisie* 2016) and is offered for free in government facilities. The pharmaceutical method has made abortion less invasive and easier to provide, as paramedical personnel can administer it and it can take place at

home, but it can paradoxically become an obstacle for some. An ambiguity in the law means that most clinics will not permit women to take the medication at home, but must instead attend the clinic for two days, and then return for a follow up two weeks later. It is difficult, or impossible, for many women who live in peripheral areas to travel away from home to do this.

The Tunisian abortion law, which is contained in article 214 of the Penal Code, allows legal abortion until the end of the first trimester and later if the physical or mental health of the mother is at risk or the fetus is severely impaired. Article 214 was promulgated in 1973 and modelled on surgical abortion. It states that abortion should take place in medical facilities under medical supervision and that administering any medication to terminate the pregnancy is a crime. When medical abortion was introduced in the early 2000s, the text of the law was not changed; instead the Ministry of Health issued a circular letter stating that a midwife or a nurse could administer the medication at a woman's home, despite the fact that this contradicted the 1973 law. Several doctors and jurists made use of this oversight to oppose it (Maffi 2020). Healthcare providers in the public sector often ignored the circular letter, claiming that the law did not allow it, and that medical abortion was dangerous as it could cause severe haemorrhage (Lahbib 2015). Consequently, most ONFP clinics did not permit medical abortion at home or allowed only part of the procedure to take place at home. Indeed, once their request to get abortion care was accepted after a preliminary medical interview and examination, women had to go to the facility by appointment to take mifepristone the first day and misoprostol 24 or 48 h later, and then wait in the clinic until the expulsion of pregnancy or the clinic closed. During my fieldwork, there was only one clinic that allowed women to take misoprostol at home without coming back to the facility. Moreover, women who did not come back for the follow-up visit after two weeks were severely reprimanded if they came back later for another reason.

Some contraceptive methods, such as the implant, intrauterine device (IUD), and injectables, can be impossible to adopt for poor women. These methods need regular surveillance by health professionals who are mainly located in urban centres (Ben Dridi and Maffi 2018), and are therefore inaccessible to these women who live in peripheral areas. IUD-related infections are frequent, due to the unhygienic conditions in which many women live, and hormonal contraceptives have several side-effects that must be monitored by health personnel. It is difficult for many of these often illiterate or little-educated women, to understand how to use biomedical contraceptives, and this is an important factor that, together

with the financial cuts and the economic crisis, contribute to making access to SR care very challenging. As I witnessed, the erroneous understanding of the ways in which the contraceptive methods available in public facilities work is at the origin of many unwanted pregnancies and the necessity to resort to abortion care. In the clinics I attended, few women refused to use bio-contraception, but many of them did not know how to use hormonal methods and became unintentionally pregnant. On the one hand, they did not always receive clear explanations on how to use them, and on the other, many clinic users shared a local representation of the female physiology that is different from the biomedical one, making it arduous for them to understand what health professionals said.[3] Some of the available contraceptives require strict discipline: one of the two pills offered in government ONFP clinics is a progestin-only medication that needs to be taken every day at the same time to be effective. If a woman takes it at a different time only one day, she can become pregnant, and I met several women who had experienced this situation. Others had become pregnant while they were breastfeeding, because they did not know that it could happen if they were not practicing exclusive breastfeeding. Others had been told by health providers that, after a Cesarean section, they had to wait for six months before using the IUD and had consequently become pregnant because they did not use any other method. These are but a few examples that concern married women who have socially legitimate sexual intercourse and regularly attend ONFP clinics.

Although unmarried women can attend government facilities called "youth-friendly spaces" where they should be cared for by well-trained personnel, they were often stigmatized, especially when they came for abortion care and, even more, for repeated abortions (Maffi 2020). Several health providers severely reprimanded unmarried women for being irresponsible if they did not (regularly) use contraception. Despite some staff's hostile attitudes, many unmarried women did not like using bio-contraception for several reasons. The main one is that most of them did not have regular sexual intercourse with their partner and therefore did not wish to take the pill, have the implant, or injectables because of their side-effects (ONFP 2006). Moreover, a majority of unmarried clinic users thought that hormonal contraceptives could make them sterile, so that, when they got married, they would be unable to conceive. Marriage is the only institution within which children can be socially legitimate and having children is of the utmost importance to realize a woman's adult identity. Because of this, young clinic users were very concerned with their reproductive future. In Tunisia, sterility is still perceived as a social stigma that can heavily affect a woman's and a

couple's destiny (Adhoum 2010). Some young women had other misconceptions about contraceptive use and thought that they had to take the pill only on the day they had sex with their partner. Those who used injectables, a method that requires administering an injection every three months, forgot to come back to the clinic at the right moment, or thought it was not necessary because their menstrual cycle had not started again. The personnel considered the IUD unsuitable for unmarried women, because they were seen as having many sexual partners and thus more subject to sexually transmitted diseases and consequent sterility. Hence, only married women who had at least one child were offered IUD as a contraceptive method. Overall, many unmarried women who came to the clinic for abortion care had previously refused contraception, stopped using it, or failed to use it correctly. Many young clinic users who still lived with their families were also afraid that their mother or sister would discover they used contraception and hence that they had a sexual life. Premarital sex, although not legally sanctioned, is socially condemned and virginity is a very important feminine value (Ben Dridi 2017; Sellami 2017). A consequence of this is that young clinic users avoided using biomedical contraception, because it gave material form to their hidden sexual life. Many young women felt a contradiction between social norms emphasizing female chastity before marriage and their sexual practices which are similar to those of young Europeans, as the age at first sexual intercourse is between 16 and 17 years (ONFP 2002; Foster 2002). Premarital sex is common among young people also because age at first marriage is elevated (Ouadah-Bedidi et al. 2016).

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Those who "should not" reproduce

Although premarital sexuality is widespread, Tunisian society harshly condemns procreation outside of wedlock. Most unmarried women who have children are ostracized by their families and are often unable to support themselves and their children unless they can get a job or find some help, for example through an NGO. The Tunisian NGO Amal, which was founded in 2000, offers temporary shelters to "unwed mothers," and helps them to get professional training for finding a job. The association also offers legal and psychological assistance to its beneficiaries who belong mostly to unprivileged groups (*Enquête sur les besoins de mères célibataires* 2016; *Rapport de la coalition civile des droits des enfants et femmes vulnérables UPR-Tunisie* 2016). Social class is a relevant factor in determining whether an unmarried woman will be able to keep the pregnancy and take care of her child,

although pregnancy outside of marriage is not easily accepted even among the more affluent milieus.

Most unmarried women resort to abortion if they are able to, but those who come too late to the clinic because they did not realize they were pregnant are sometimes forced to keep the pregnancy and in most cases end up abandoning their child in the hospital (Le Bris 2020). According to the French NGO Santé Sud's report (2016), Tunisian unwed mothers usually come from a rural family, have left their home to work in the city where they live in precarious socio-economic conditions, are little educated, and have suffered violence in their family. Contrary to most Arab countries, Tunisian law recognizes children born outside of marriage. However, unwed mothers are stigmatized, and their life is very difficult because they do not receive the necessary socioeconomic support. Even the health providers who are supposed to help them often show hostile and humiliating attitudes towards unwed mothers. As expressed by one unwed mother interviewed by Santé Sud: "For the staff of the family planning clinics, if you are not married, you cannot have a sexual life, and for Tunisians, if you do not have a husband you cannot be a mother!" (*Enquête sur les besoins des mères célibataires* 2016:19). Amroussia and colleagues (2017) examined the attitudes of birth attendants in government hospitals toward unmarried women and showed that the staff mistreated and insulted them when they came to give birth. A report from the Tunisian Coalition for the Rights of Children and Vulnerable Women states that

> many unmarried mothers were victims of institutional violence at some point of their pregnancy or when they gave birth. Several denounced verbal and even physical violence when they tried to file a complaint with the police station, in the social services but especially by the staff of government hospitals (midwives, and even doctors in some cases). (*Rapport de la coalition civile des droits des enfants et des femmes vulnérables UPR-Tunisie* 2016:11)

This attitude is also present among health providers working in ONFP clinics. In one of the clinics where I did fieldwork, I regularly attended situations of symbolic and structural violence in which unmarried women seeking abortion care were treated as culprits, severely reprimanded, humiliated, and even threatened by the personnel. When they entered the room for the socio-medical interview, they had to stand in front of two or three staff members sitting behind a table and interrogating them with an annoyed bureaucratic tone. When the staff learned that a young woman came for an abortion, they asked her reproachfully why she did not use contraception. Verbal violence continued when the personnel filled in the socio-

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medical file of each patient, which enabled them to ask questions about the number of sexual partners, the time of the first sexual intercourse, if the woman smoked, drank alcohol, or used drugs. The interview offered staff the opportunity to humiliate and reprimand the woman and frequently, if she did not agree to use a hormonal contraceptive, they threatened that they would not provide her with an abortion again. They also tried to frighten clinic users, saying that they could become sterile or develop uterine cancer if they aborted. This violence and even the possibility of being turned away in ONFP clinics is confirmed by an unwed mother describing her attempt to get abortion care: "A midwife told me: you should have thought of the consequences before you spread your legs, we do not offer abortion care here" (*Enquête sur les besoins des mères célibataires* 2016:18).

However, turning away unwed women when they seek abortion care is not so common, at least in the urban areas of northern Tunisia. According to my own research and that of Soraya Ksontini (2017), although ONFP staff are often rude to unmarried women seeking abortion care and tend to make them expiate their sexual "recklessness," they usually help them to stop the pregnancy. The staff are aware of the consequences the continued pregnancy could have for most young women and are sometimes worried that they could commit suicide. A midwife told me that at the beginning of her professional career she was opposed to abortion—although she had to offer it—but had changed her mind when she had understood the social consequences of an unwanted pregnancy: attempts to get an unsafe abortion, a child abandoned at birth or mistreated in her family because she was undesired, and the mother's marginalization and poverty. She had met many women who had experienced these situations and had decided that it was a minor evil to abort compared to letting an unwed woman continue the pregnancy. Whereas during Ben Ali's rule unwed mothers were discouraged to reproduce for social, economic, moral, and religious reasons (Islam does not accept sexuality and filiation outside of marriage) after 2011, stigmatization increased. Ennahdha has deemed them as sinners who have committed adultery (*zina)* and their children as *awled hram* (children of sin) (*Rapport de la coalition civile des droits des enfants et des femmes vulnérables UPR-Tunisie* 2016:10).

Those who do not want to reproduce

Married women seeking abortion care can be turned away more frequently by those health providers who are against abortion; regional hospitals do not offer abortion services anymore

and even several ONFP clinics have stopped offering it for several years (Association tunisienne des femmes démocrates 2013). This brings me to consider a group of women who do not want to reproduce because their socio-economic or familial situation is difficult and the birth of a(nother) child would affect their condition and possibly that of their family members. These women belong to the population's poor strata and live in degraded urban areas in small apartments often with their husband's parents and siblings. Most of these women do not work outside of the home and their husbands are jobless or earn a very low salary. The tremendous inflation Tunisia has known since the revolution has made the cost of living prohibitive and even buying diapers, clothes, and food for one more child can be unsustainable for many families. Many women I met in ONFP clinics belong to this strata of the population and were worried about the possible effects that birthing a child could have on their family's condition. They rarely spoke in detail about their reasons for wanting to abort and used the term *thuruf* (circumstances) to explain their choice. Some women are victims of violence within the family, others know that the family will be unable to support another child; some women who have an informal job (and no maternity leave), cannot stop working for months without compromising the family's financial situation. For some other women, two children too close to each other were difficult to deal with and hence they preferred to have an abortion and wait some years before having another child. A few recently married women I met had become pregnant quicker than expected and wanted to abort so that they could first finish their studies or professional training. Some midwives told me that for some of these women getting pregnant was a proof (to themselves) that they were fertile. Many professionals I interviewed argued that there is an increase in the number of women over 40 who come for abortion care. During the consultations I attended, several of them told the provider that they thought they were not fertile anymore and thus had stopped using contraception. Others wanted to prove to their husbands that they were still fertile and thus desirable as the ability to conceive is associated with femininity. Some other women I observed told the midwife that they had to take care of a sick child or family member and were unable to attend to a newborn. A few women who were getting divorced did not want to keep a pregnancy that would maintain or reinforce the ties with their husbands and family. I was particularly struck by the case of a well-educated woman in her mid-thirties who had tried to conceive for many years and, when she finally became pregnant, had decided to have an abortion because she was getting divorced.

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It is worth noting that, whereas a large number of women I met did not want to have more than two children, midwives in the government facilities often tried to convince them that they should have at least two, and possibly three children. They insisted that the women seeking abortion care should keep the pregnancy especially when they had "only" one child or if they were already in their late thirties. Several midwives I met systematically told women that they should avoid having children after 40, as the probability of the babies having malformations or genetic disorders was much higher. Besides, some women in their late forties, who already had a married son or daughter and one or more grandchildren, considered it shameful to have a child at that age. This attitude is probably related to the fact that being pregnant and having a child means that the woman had still an active sexual life. Implicitly, the idea is that they should not continue having sex when their children enter adulthood. For several women I met, the conclusion of their reproductive career coincided with the end of their sexual life, as they considered it an unpleasant duty.

Therefore, according to health professionals and social norms, not only unmarried women, but also "old" (over 40) women should not reproduce. However, the most common situation I witnessed was when married women who came to seek abortion care were faced with health professionals' explicit refusal to offer it. In 2013–2014, many of them had to go through tortuous abortion itineraries as they were turned away by regional hospitals and ONFP clinics with various pretexts: some were told the facility did not offer abortion care anymore, although this went against the law; others were turned away because allegedly there was a counter-indication due to their health conditions; others were asked to wait a few weeks because they had an early pregnancy and medical abortion cannot be performed too early; and others were reprimanded and humiliated by providers who read in front of them passages of the Koran, arguing that abortion is a murder and a sin. A significant number of women I met had tried to get abortion care in at least two or three government facilities before ending up in a clinic that offered abortion services. Some of them had spent several weeks trying to find a clinic and had arrived at the facility where they could get it at the beginning of the second trimester, after the legal term for abortion was already over; others were still on time to get an abortion but had experienced anger, fear, and anxiety, and were extremely distressed. For some of these women, their abortion itineraries were long and complicated because of very trivial reasons, that nonetheless had completely changed their experience of it or even made it impossible. For example, a mother of two who, after a missed period, had gone quite early to an ONFP clinic to get abortion care was turned away by the personnel at the reception desk

without enquiring any further about the possible date of conception. The staff told the woman to come back after 10 days, because it was too early to get a medical abortion. Hence, she had gone to another ONFP clinic where the doctor had told her that she was already eight weeks pregnant, and therefore it was too late to get a medical abortion in her facility and she could not offer her surgical abortion. When she arrived at the hospital, she was already at the end of the first trimester and the midwife who examined her was not sure whether the department head would accept her request to terminate the pregnancy. Eventually, the woman was denied abortion care because the pregnancy was too advanced. She not only had to keep the baby, but had gone through a very difficult time because of the attitude of the personnel at ONFP clinic's reception desk. It is possible that the staff at the reception desk were not even trying to dissuade her from getting an abortion, as some practitioners do by postponing the access to medical care, but were just overwhelmed by work, and thought, on the basis of the scant information the woman had given them, that she was in a very early stage of pregnancy.

Those who cannot reproduce

Infertile couples are the third group of women who contribute to non-reproduction in Tunisia. If in the Middle East the "prevalence of infertility is expected to vary between 10 percent and 15 percent of married couples" (Serour 2008:35), it is worth noting that male infertility is more frequent than in other regions (Inhorn et al. 2017:43). In Arab countries, not only the widespread use of ARTs, but also the high rate of male infertility are triggering sociocultural changes, such as redefining the local gender regimes, transforming masculinities, and reshaping conjugal relationships and those of family (Inhorn 2012). In Tunisia, 15 percent of couples are infertile (Annabi 2009:100) and many of them, if they can afford it, resort to ARTs because reproducing is considered a major step in the life of women and men to create a family and perpetuate the father's descent group (*nassab*). Marrying and having children are considered as central moments in the life of every Tunisian citizen, although all clinicians I met declared that being unmarried and childless is socially frowned upon for women much more than for men. Although virility is strongly related to reproduction, social norms tend to protect men's reputation by blaming infertility on their wives, even when the former are responsible for the medical problem (El-Kissi et al. 2014).

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In Tunisia, the first IVF baby was born in 1988 in a private clinic of the capital. Over the last 10 years, the ART industry has known an extraordinary development in the country:

the number of patients has increased exponentially and private establishments offering these technologies have multiplied at high speed. The burgeoning of IVF clinics must be understood within the very important development of the Tunisian private medical sector that started in the 1980s and provides its services to patients coming from several countries in Africa and the Middle East (Lautier 2008; Rouland and Jarraya 2020). Its development is not state driven but rather the result of the initiatives of medical entrepreneurs filling the gaps left by and compensating the increasing deficiencies of the public health sector (Rouland and Maffi, forthcoming).

In 2010, Tunisia had only two public ART centers, one at Aziza Othmana Hospital in Tunis, the other at Farhat Hached Hospital in Sousse, and two private infertility clinics (Adhoum 2010). In 2019, there were 12 clinics, the majority of which were located in Tunis and Sfax—the two largest cities—and others planned to open their doors in the south (Djerba) and west (Kasserine). Several public hospitals had applied to the Ministry of Health to create infertility centers, including Rabta University Hospital in Tunis, the University Hospital of Sfax—which covers the southern governorates of Tunisia—and Monastir Hospital; the military hospital in Tunis has also recently opened an IVF center reserved for military personnel and their families. The expanding Tunisian ARTs industry is at the center of an emerging reproscape that includes Libya and Algeria, whose infertile couples are the main foreign clients of Tunisian private clinics, and more and more countries from Francophone Africa (Mali, Mauritania, Cameroun, Burkina Faso, Gabon, Niger). Largely understudied, this developing "medicoscape" (Hörbst and Wolf 2014), in which cross-border reproductive care is crucial, is becoming a large space made of various networks. Considering French is the common language, the post-colonial constellations of knowledge and technology circulations (training in academic institutions in France or French-founded Medical Schools in African countries such as the Medical School of Dakar, annual conferences of francophone medical associations, the collaboration between French or Belgian and local laboratories of biology, and the policies of international pharmaceutical industries to make medicaments and competences necessary for IVF available) are playing a major role in reinforcing various forms of collaboration between doctors of different countries, pharmaceutical industries, and medical tourism agencies (Rouland and Maffi, forthcoming). The emerging digital community of infertile patients who exchange on forums, websites and blogs, and even the more traditional word-of-mouth networks, are also contributing to expanding this new reproscape (Bonnet and Duchesne 2016).

If the private ART industry caters to Tunisian and a rising number of (north) African infertile couples, government infertility centers are lagging behind because of the very high costs of the technologies, equipment, and specialized staff needed to make them function. Many doctors trained in public hospitals leave them to work in private clinics where they earn much better salaries than in the government sector. A doctor in charge of a government ART center, told me that long waiting lists, and aging equipment meant that the success rate is less than that of private clinics. In 2019, this doctor working in the public sector, at the height of his career, as head of his department and full professor at the medical school, had a salary of just 3400 Tunisian dinars per month (1000 euros) in a country where the economic crisis has made the cost of life close to that of several European countries.

Only Tunisian citizens can attend public IVF clinics where costs are lower than in the private sector:[4] For specific patient categories,[5] social security reimburses the costs of the medicaments used for hormonal stimulation, but not the numerous other costs related to ARTs. If tests and analyses must be paid, the other medical services are free except for a co-payment of 250 dinars (around 85 euros)—which can nonetheless be prohibitive for many poor families. According to their reproductive disorders, couples may need only artificial insemination (injecting the sperm of the husband into the uterus of her wife), which is less expensive, or they may need the more expensive intracytoplasmic injection (ICSI). As the success rate is rarely more than 30 percent, many couples need to repeat the treatment several times before (possibly) having a child, which makes ARTs expensive and uncertain.

When we look at which Tunisian citizens are entitled to receive a partial reimbursement for IVF treatments, the criteria entailed in the law of reproductive medicine (promulgated in 2001) establish that: only heterosexual married couples can resort to it and only their gametes can be used to obtain an embryo; it excludes egg, sperm, or embryo donation as well as surrogate motherhood in accordance with the dominant Sunni Islamic position (Inhorn and Tremayne 2012). The social security reimbursement rules for the medicaments necessary to the IVF procedure, which count for almost one-third of the total costs, are that the woman (nothing is said about the man) is under 40 years, and the number of attempts are no more than four (Ghorbal 2016). The law of reproductive biomedicine was not changed after the revolution of 2011, despite the dissatisfaction of many clinicians who wish to introduce more recent and effective biomedical technologies not included in the 2001 law.

In light of the facts described, the rules of the state on the one hand, and the socioeconomic situation of infertile couples on the other, produce a stratified techno-

reproduction shaped by various aspects: the financial resources to access the private IVF sector if couples are well-off; age of the woman; financial resources and geographic location for the less privileged in that, if they live far from one of the two public IVF centers, they might not be able to seek ART. Moreover, following a treatment requires being able to stay in the city where the hospital is located for several days at different stages of the procedure, and many families cannot afford to pay for an apartment and for transportation.

Although cultural norms and values can generate forms of resistance toward IVF-technologies, in the late 2010s, Tunisian infertile couples widely accepted biomedical reproductive technologies, although their use is rarely made public within their family and among their friends (Adhoum 2010; Rouland and Maffi, forthcoming). The perpetuation of social shame and blame related to infertility and their impact on masculine and feminine identities seem to be important factors hindering the open discussion of reproductive disorders and the decision to resort to ARTs for Tunisian couples. Suspicious attitudes and accusations of being the child of someone else can also be deleterious for the baby conceived with ARTs. This is why most infertile couples do not inform their relatives and friends if they choose to resort to IVF.

Conclusion

The Tunisian population is aging, and the birth rate has declined to replacement level. Since the mid-2000s, new anxieties related to the ongoing demographic transformations circulate in Tunisian government institutions and among healthcare providers. The 2011 revolution marked the beginning of a democratization process, but at the same time has contributed to deteriorating the country's economic situation. Cuts in public health, including SR health services, have severely affected women's access to contraception and abortion, as they have affected all other care sectors. Despite the end of the state's commitment to family planning policies, the Islamist government that ruled between October 2011 and February 2014 did not take explicit pronatalist measures. The attempt of Najiba Berioul, a deputy of Ennahdha, to question Tunisian women's right to abortion in 2012 failed and the article of the Penal Code was not changed. Her intention has to be interpreted in relation to several other of Ennandha's initiatives to question women's rights, rather than as the beginning of a new demographic

policy. However, especially after 2011, healthcare providers in government facilities began to refuse abortion care and some methods of contraception, either for religious reasons or following already existing social norms. Although health practitioners' social conservatism was present before the revolution (Labidi 1989), the possibility to refuse abortion care was a new phenomenon, as under Ben Ali's rule it was dangerous to express personal opinions and act accordingly in government institutions. After having been the objective of official demographic policies for 40 years, non-reproduction is today a social obligation for unwed mothers, an individual or family choice for married mothers, and it is a tragic condition for infertile women (and couples) who cannot access ARTs. At the same time, forced reproduction has emerged as one of the revolution's effects because many poor women are faced with limited access to contraception and abortion care in public facilities.

The boom of the ARTs industry in Tunisia shows the importance of procreation and offers a hope to couples trying to overcome the burden of infertility. Class, age, socioeconomic status, and place of residence play a crucial role in determining who can access ARTs, as well as abortion and contraception. The private sector offers all these services to women who can afford them, whereas poor women, who attend government facilities, are often unable to obtain them. The lack of access to techno-reproduction (in the private sector) on the one hand, and to SR health services (in the public sector) on the other, has opposite effects: it prevents some women to reproduce and force some others to do so against their will. Non-reproduction, similar to reproduction, is dominated by stratified logics that by default shape the degree of autonomy and agency of Tunisian women.

Commenté [MR15]: Strengthen conclusion – would it make sense to draw a stronger link between stratified nonreproduction and the revolution ?
And/or no official pronatalism, but it has happened by default – but stratified ?

Commenté [UMO16R15]: It has happened by default. There is no explicit and official pronatalist policy.

Commenté [MR17R15]: Is my edit ok ? Delete if you don't want it !

Commenté [UMO18R15]: I would prefer something like "without an explicit political will" or nothing. I do not like too much "by default".

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Commenté [MR19]: Thank you !

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Code de champ modifié

[1] "The health financing system in Tunisia is characterized by the coexistence of different mechanisms for health risk coverage based on a basic plan characterized by the coexistence of two explicit regimes. The first is the compulsory health insurance scheme covering workers in the formal sector (…). The second is the assistance plan (…) which covers care in public health structures (…) for the most disadvantaged (…)" (Jaouadi, Mathauer and Mokdad 2019:645).
[2] I thank Betty Rouland and Mohamed Lamine Ben Ayache for allowing me to use material from some of their transcribed interviews.
[3] Many women attending public clinics share the idea that menstrual blood is expelled each month in order to keep the body healthy, according to a humoral theory dating back to ancient Greek medicine.
[4] The cost of an IVF treatment can be between 1500 and 2000 euros according to the technologies used.
[5] If they attend a private clinic, the state reimburses up to four hormonal stimulation treatments to Tunisian childless women under the age of 40 with health insurance.

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