



Amazons in Mali? Women's experiences of breast cancer and gender (re)negotiation

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ABSTRACT

Breast cancer is the second most common cancer, with more than 2.31 million cases diagnosed worldwide in 2022. Cancer medicine subjects the body to invasive procedures in the hope of offering a chance of recovery. In the course of treatment, the body is pricked, burned, incised and amputated, sometimes shattering identity and often changing the way women perceive the world. In sub-Saharan Africa, incidence rates are steadily increasing and women are particularly young when they develop breast cancer. Despite this alarming situation, the scientific literature on breast cancer in sub-Saharan Africa is poor and largely dominated by medical literature. Using a qualitative approach and a theoretical framework at the intersection of the sociology of gender and the sociology of the body, we explore the discourse strategies of women with breast cancer in Mali regarding their relationship to the body and to others. Based on 25 semi-directive interviews, we analyse the experiences of these women. Using the image of the Amazon woman, whose struggle has challenged gender because of its masculine attributes, we explore whether these women's fight against their breast cancer could be an opportunity to renegotiate gender relations. The experience of these women is characterised by the deconstruction of their bodies, pain and suffering. The masculinisation of their bodies and their inability to perform certain typically female functions in society (such as cooking or sexuality) challenges their female identity. The resistance observed through the sorority, discreet mobilisation and display of their bodies does not seem to be part of a renegotiation of gender relations, but it does play an active role in women's acceptance of the disease and their reconstruction.

1. Introduction

Breast cancer is the second most common cancer, with more than 2.31 million cases diagnosed worldwide in 2022 (Global Cancer Observatory, 2022). For a long time, cancer was thought to affect women almost exclusively in northern countries (Frieden et al., 2018), but in recent years there has been a very rapid increase in breast cancer incidence in Africa, particularly among women under the age of 45 (Parkin et al., 2019).

1.1. Particularities of breast cancer in sub-Saharan Africa

As mentioned, women affected by breast cancer are particularly

young in sub-Saharan Africa (Bagnan-Tonato et al., 2017; Togo et al., 2010; Black and Richmond, 2019; Lokossou et al., 2017; Traoré et al., 2022; Joko-Fru et al., 2020), although this young age is not yet well explained. Furthermore, in sub-Saharan Africa, 65% of women present with advanced disease, including 20% with metastatic disease (metastatic stage means that the cancer has spread to a distant part of the body). There are a number of reasons for this late diagnosis: poor knowledge of the disease among women and communities, rare screening policies, mistrust of the medical establishment, reliance on traditional medicine, the cost of transport and accommodation for women who do not live in the capital cities, the cost of medical treatment and the lack of specialist doctors, infrastructure and equipment (Grosse Frie, Samoura, et al., 2018a,b). In fact, in many sub-Saharan

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African countries, cancer care services are underdeveloped, the resources available are very limited, they are concentrated in the capital cities, and there is, for example, no radiotherapy equipment (Nédélec, 2023). Women with breast cancer are highly stigmatised largely due to a lack of awareness of the disease in the community. HIV/AIDS, for example, is more normalised and accepted in South Africa than breast cancer because it is more publicised and therefore more familiar (Bosire et al., 2020; Zwane, 2021). Despite this alarming situation, the scientific literature on breast cancer in sub-Saharan Africa is poor, and largely dominated by the medical literature (Diarra, 2021). While social science research on the experience of the cancer is the subject of a rich literature in the North, it has no equivalent in the South, particularly in sub-Saharan Africa (Diarra, 2021). As a result, little is known about the life paths of these sub-Saharan African women and the reconstruction processes they undergo in the aftermath of cancer.

1.2. Women and breast cancer in Mali

In the hope of a cure, cancer medicine subjects the body to invasive procedures and medical treatment affects many dimensions of bodily and gendered identity. In the course of treatment, the body is pricked, burned, incised and amputated, sometimes shattering identity and often changing the way women perceive the world and their relationships with themselves and with others (Hamarat, 2021; Zwane, 2021). In many societies, breasts are seen as emblems of femininity (Fortier, 2021a), and their removal often leads to a symbolic loss of femininity for oneself and others, which can be explained by the internalisation of gendered body norms. Mastectomy and the resulting asymmetry can be a source of profound physical and psychological distress. The amputation provokes a painful experience of “body deconstruction”, transforming a woman’s corporeality and embodiment and questioning her identity (Piot-Ziegler et al., 2010). In northern countries, about 30% of women with breast cancer will have a mastectomy (the surgical removal of the breast) (Giaquinto et al., 2022; INCa, 2021) while it is the most common form of treatment for breast cancer described in Africa (Sutter et al., 2017). A study of around one hundred cases in Bamako showed that this was the case for almost 95% of women in Mali. This high rate of amputation can be explained in part by the advanced stage of the disease, but also by a lack of technical facilities.

The median age of women affected by breast cancer in Mali is 45 years (Grosse Frie, Kamaté, et al., 2018a,b), compared with 62 years in the US (Giaquinto et al., 2022) and 64 years in France (Lapôtre-Ledoux et al., 2023). Mali is a large Sahelian country with a low-income economy and rapid population growth, with a fertility rate of 6.3 children per woman (Institut National de la Statistique (INSTAT) et al., 2019). Forty-nine percent of Malians live below the extreme poverty line (USAID, 2019) and 27.5% of women report being illiterate. The median age at marriage is 17.8 years, and polygamy is common, affecting 37% of women. The majority of women are sexually mutilated (88.6%), and 38.5% of them report being victims of sexual or physical violence by their husband/partner (Institut National de la Statistique (INSTAT) et al., 2019). Most women are involved in domestic work. Their level of involvement varies according to variables such as age and marital status (monogamous or polygamous husband): having co-wives significantly reduces the personal investment in domestic work. Regardless of their age, women in monogamous households are more involved in the decision-making process than the wives of polygamists. Co-wives are often portrayed as ‘sisters’, but behind this social kinship there is often a great deal of rivalry (*sinaya* in Bambara, the most widely spoken language in Mali) (Bove et al., 2014; Miselli, 1998).

1.3. Breast reconstruction surgery: resexing and resexualising bodies

In many northern countries, the beauty industry contributes to giving sick women an appearance associated with ‘health’ and ‘femininity’, in particular by promoting bras, wigs, scarves, make-up (Hamarat,

2021) often with an injunction to be identified as a ‘woman’ in society. For this reason, many surgeons have been offering breast reconstruction for several years. In Mali, a team of surgeons (all men) offer this procedure in a public hospital (Schantz et al., 2024). For Greco, women who choose surgical reconstruction are trying “to obtain a body in which to be comfortable and which will allow them to live a life as close as possible to their pre-diagnosis one” (Greco, 2016a). However, it has also been suggested that ‘breast reconstruction’ surgery “also has a less avowed sexual purpose, aimed at shaping the female body according to male fantasies” (Fortier, 2021a) with the aim of obtaining “a body that conforms to the hegemonic canons of beauty” (Greco, 2016b).

Fortier also explains that a woman without breasts is part of the unrepresentable because she combines attributes of both sexes, with both a ‘masculine’ torso and a ‘feminine’ sex (Fortier, 2021b). This representation of a third sex or an intersex body is not ‘thinkable’ in many societies, and breast reconstruction replaces this mastectomised body in a binary category. This approach is also in line with that of Laqueur, who has shown through a historical approach to anatomy that gender precedes sex and that medicine participates in a binary construction of the sexes (Laqueur, 2013). In this way, breast reconstruction surgery resexes the body as well as resexualising it, as we have just seen. Although breast reconstruction surgery is possible in Mali, it remains rare and marginal. This was not an obstacle to our research, as our aim was not to interview women who had undergone breast reconstruction but women who had had their breasts amputated, in order to retrace the experience of the illness in the body, the reconstruction of this ‘body-identity’ and any renegotiation or subversion of gender relations based on this body.

1.4. Resisting and reappropriating an asymmetrical body

The aim of quoting northern contexts is not to have the white woman at the centre or as a ‘point of reference’ (Dorlin, 2005). However, the work that has been published in these contexts helps to interrogate the resexuation and resexualisation of women’s bodies (Fortier, 2021b). Indeed, among women who have undergone breast amputation in France, less than one in three would choose to undergo breast reconstruction (INCa, 2021). Through the concepts of resistance and reappropriation, Greco explores “what living with an asymmetrical body means” (Greco, 2016b). Could this refusal to reconstruct then be analysed as a resistance of women, as a demand for the right to be different, which throws up “gender trouble” (Butler, 2006)? Various voices have been raised in support of the acceptance of an asymmetrical body. This is the case of Lorde (2020), a lesbian feminist poet and pioneer in this “politicisation of the mastectomised body” (Greco, 2016b). In France, the association *Les Amazones s’exposent* also proposes to break the taboo on the asymmetrical body through exhibitions and videos that promote the right to asymmetry and show women who are fulfilled and fighting. These images show smiling women alongside their husbands, demonstrating that love is possible after a mastectomy and that the Amazon body can be beautiful, erotic and feminine (Fortier, 2021a). However, while these narratives shake up certain traditional representations, at the same time they reproduce naturalizing and heteronormative discourses (Hamarat, 2021).

With the SENOVIE research project (“Therapeutic mobility and breast cancer”), we set out to describe the life paths of women with breast cancer in Mali, using an approach at the intersection of the sociology of gender and the sociology of the body. In line with the work of Froidevaux-Metterie, in this article women’s breasts are considered not only as vectors of assignment but also as a means of affirmation and emancipation (Froidevaux-Metterie, 2020). In this research, we study the discourse strategies of women who have undergone breast cancer in Mali concerning their relationship to the body, to sexuality and to others. We look at the “embodied experience” (Joyce, 2005) of illness, and more specifically at changes in ‘femininity’, in the sense of ‘feeling like a woman’. To this end, we analyse the discourses of women who

have experienced breast cancer in Mali through the prism of the concept of 'body-identity' proposed by Fortier (2021b) which expresses the close interdependence of identity and the body. The anthropologist points out that "bodily transformation, in the case of mastectomy, leads to 'having' a new body, and, consequently, to a transformation of 'being', or identity" (Fortier, 2021b). Similarly, research in Switzerland has described how mastectomy causes a "deep identity crisis". For the women interviewed, mastectomy was not just a surgical procedure that left superficial physical scars. It was a traumatic experience that shook the foundations of women's lives and challenged their identity (Piot-Ziegler et al., 2010). This research has highlighted how identity and self are intimately linked to embodiment and corporeality, and that issues of shattered identity and self arise very early in the course of the illness, even before surgery (Piot-Ziegler et al., 2010).

1.5. The figure of the amazon: resisting and struggling with gender

Throughout the world, the vocabulary used to symbolise the struggle of women with breast cancer is often associated with battle or war. Women with breast cancer are often compared to "fighters" or "survivors" (as in the case of the association "Les Combattantes du cancer" in Bamako, Mali). This martial tone, together with the image of a woman with her breast cut off, has similarities with the image of the Amazon, an image used in different parts of the world and in West Africa, in Benin. Historically, the Amazons of Dahomey (in the 18th and 19th centuries in present-day Benin) were a female military regiment, nicknamed for their resemblance to the warrior Amazons of Greek mythology. The Amazons were admired for their bravery and fighting spirit, traits that were considered masculine, thus upsetting gender roles. In this way, the Amazon disturbed the relationship between the sexes by fighting as a warrior. The central question that guided our research was the following: Is the figure of the Amazon, a female warrior and fighter with her breast cut off, a figure that disrupts and subverts a dichotomous vision of the sexes, operational and relevant in the Malian context? Does the profound identity crisis described in women with breast cancer and their struggle to save themselves lead to a (re)negotiation of gender relations? What subversions, what reproductions, what (re)negotiations of gender relations during and after breast cancer in Mali?

2. Materials and methods

To answer this research question, we used a qualitative approach based on semi-structured interviews following the scientific criteria for qualitative research COREQ (Consolidated criteria for REporting Qualitative research) (Tong et al., 2007).

2.1. Research team and reflexivity

Two researchers collected the data for this article: a male Malian health anthropologist, a lecturer at the University of Medicine in Bamako with extensive experience of interviews on sensitive subjects such as illness, gender and sexuality, and a female French sociologist who has been conducting research with carers and women in Mali for 10 years. She also trained as a midwife and has worked in West Africa. The interview grid was shared by the researchers and an initial interview was conducted together to ensure that they had the same understanding of the questions.

2.2. Study design

We situate ourselves within a feminist methodological approach that promotes thinking theory and method together, and whose theory is based on the acceptance that gender is a category of analysis rather than an object to be observed; and by drawing on a body of feminist literature (Clair, 2016). We also situate our thinking within a sociology of the body in which the body is not thought of solely in its biological dimension, nor

in its materiality, but as the "privileged vector of our presence to ourselves, to the world and to others" (Froidevaux-Metterie, 2020, p. 17) and "a symbol of society" (Douglas, 1967). In line with research developed in recent decades, the body is not studied in isolation, but is considered in relation to identity (Lock, 1993). By using the terms 'experience' and 'lived experience' of women, we wish to emphasise the "transformative dynamic by which a bodily event or upheaval produces simultaneous existential and social effects, involving a modification of the relationship to oneself, to others and to the world" (Froidevaux-Metterie, 2020, p. 20). Finally, in moving away from a culturalist and essentialist visions of women's bodies in Mali, and hoping to contribute to a decolonial feminism (Dorlin, 2005; Vergès, 2019), we consider the body as a site for reconfiguring relationships with oneself and others, and seek to explore the complexity of women's multiple and sometimes contradictory logics of emancipation from identification (Hamarat, 2021).

The research took place in Bamako between July 2021 and July 2022. A total of 25 interviews were conducted with women with breast cancer who we were able to meet through two cancer associations (n = 20) and doctors (n = 5). The interviews were conducted in the women's homes (n = 20) and in the health facilities in a quiet, isolated room (n = 5). The first part of the interview traced the women's care path: the first signs of illness, the various recourses (formal and informal), contacts, information received, relationships with health professionals, difficulties, costs and mobility. The second part was devoted to the relationship with the body and representations of 'femininity' - understood here as "the relationship with oneself, with others and with the world that passes through the gendered body" (Froidevaux-Metterie, 2020, p. 23) - in the context of the illness: the impact of treatment on the body, the experience of amputation, self-image, sexuality, conjugality, perceived discrimination, the exposure of the body, the relationship with other women (particularly possible co-wives when mentioned). These two main themes were used to explore the issue of biographical rupture (marital, professional and social rupture). This article focuses mainly, but not exclusively, on the data collected in the second part of the interviews.

The median length of the interviews was 70 min. The women ranged in age from 30 to 70 (median age 43), had a variety of backgrounds (housewives, doctors), all lived in Bamako but came from different regions of Mali and different ethnic groups. All the women were married, except one who was single and had no children. Of these women, some were widowed (n = 2), separated (n = 1) or divorced (n = 1) at the time of the interview. The women interviewed had between 1 and 9 children. Six women spontaneously mentioned having a polygamous husband, but this question was not systematically asked of the women. All the interviews were recorded and transcribed.

2.3. Analysis and results

The data was analysed using a comprehensive approach in order to analyse the experiences as they were lived and not necessarily as they occurred objectively (Weber, 1995). It was carried out without software. The results were presented in October 2022 at three feedback sessions in Bamako. Caregivers, women, doctors, women's associations and political decision-makers attended (over 100 people in all). They all approved the research results and helped us to improve the interpretation of the data.

2.4. Ethical considerations

The research protocol was ethically approved by the ethics committee of the Institut National de Santé Publique - INSP in Bamako (Decision N°17/2021/CE-INSP of October 26, 2021). All the interviews were conducted after the women had given their consent, which was given by signing a consent form that had been read and approved by the participant. All audio recordings and transcribed interviews were also

pseudonymised.

3. Results

3.1. Being a disfigured "one-breasted woman": body deconstruction, pain and suffering

In northern countries where treatment is available, the timing of surgery/chemotherapy depends on the stage and type of cancer. In Mali, despite a theoretical policy of free chemotherapy, treatment is mostly paid for, and many women cannot afford it (Schantz et al., 2024). What's more, there is only one radiotherapy machine in the whole country and it often breaks down (Schantz et al., 2022). For all these reasons, doctors prefer to start with surgery and perform total mastectomies with axillary lymph-node dissection (lymphatic curage) on women. Political choices such as the absence of a screening policy, the lack of universal health coverage and the lack of equipment are reflected in the scars left on women's biological bodies.

Mastectomy is commonly referred to as 'amputation' by the women we met. The word 'amputation' was used in all interviews. We will use it in the emic sense in the rest of the article. Dili, aged 43, explains: "I was afraid of death. I thought that if they amputated your breast alone, you'd die. I didn't know what cancer was, I just heard the name". The women also talked about the "operation", saying that the doctor had said it was necessary to "operate", without explaining the term.

In Mali, as in other Sub-Saharan countries (Lambert et al., 2020), cancer is strongly associated with inevitable death. The diagnosis of cancer and the need to "operate" came as a shock to the women, many of whom spoke of death, like Dili above. Some of them told us that they had initially refused to get amputated: "We were told that a woman's soul is directly linked to her breast, so I refused" Dili, 43. Some said they would rather die with both breasts than live with just one. This is due to the strong symbolic value of the breast, but also to the fear of surgery.

"The disease was diagnosed in August 2017, but the operation took place at the end of January 2018. Because I had refused to have my breast amputated (...) They said I would die if I did, so I was scared. They told me that if they put a knife in my breast, I would die (...) And when a woman loses a breast, it's as if you're no longer a woman. And I didn't like that idea at all, you have no value" Sira, 43.

As explained by (Piot-Ziegler et al., 2010), appearance is an important aspect of femininity, especially in social and relational contexts. It is part of a woman's identity and identification. Women who lose their breasts lose an important means of seduction in social contexts, and the social gaze of men, other women and people in general is difficult to withstand. In Bambara, the amputated woman is called *moussou sin kelen*, which literally means "woman with one breast". This notion of incompleteness is very present in the interviews: "You look in the mirror and you see that you are not complete" Sira, 43 years old. The "one-breasted woman" faces discrimination, stigmatisation, marginalisation, exclusion and even reclusion. Some women no longer want to go to ceremonies to avoid the gaze of others, and some are no longer invited: "Before, when there were ceremonies in the neighbourhood, we all went together, but now they go without telling me, and even this morning there was a baptism and they went to see the baby without telling me" Awa, aged 41.

Some doctors explain that some women 'disappear' at the moment of the announcement and that they lose sight of them, leading them to wander in and out of treatment, often navigating between conventional and traditional medicine. In some cases, it is the husband who refuses to allow his wife to have her breasts amputated. In general, women's autonomy is often limited and the husband's opinion usually prevails. However, many of women told us that they had finally accepted it, mainly on the advice of their doctor. On the contrary, some older women told us that they were prepared to have their breasts amputated because the functions associated with them were no longer their prerogative: "I really don't need this breast. What am I going to do with it? I don't

breastfeed, my daughter has a child of her own and her child is doing her A-levels. My husband is also dead. I don't need it" - Saroutou, 56. Amputation refusal was also observed in Ethiopia, and it is interesting to note that it was the youngest women (unmarried or with young children or still wanting children) and the oldest women (without hope) who refused surgery (Wondimagegnehu et al., 2024). In contrast, refusal of mastectomy is rare in most northern countries, such as the US, where one study reported a rate of 0.64% of women refusing the procedure (Gaitanidis et al., 2018).

After surgery, some women go through the ordeal of chemotherapy and this is a time of great suffering in their bodies. Concepts of loss and pain were omnipresent in the interviews. The absence or lack of supportive care (medical treatments to alleviate the side effects) exacerbates these effects, once again highlighting the social injustice suffered by these women. Loss includes the loss of eyelashes, eyebrows, nails and hair, but also the cessation of menstruation, the loss of appetite and the absence of 'feelings', a metaphor often used by women to describe their loss of sexual desire or libido. There is a strong link between hair and femininity, and the greatest suffering in women's discourse is the loss of their hair, as Lakaré, 46, explains: "After death, I can't think of anything worse than losing your hair. Because your hair is completely uprooted. It's like having your soul ripped out. My head felt like it was going to explode". All these losses related to breast cancer treatment (menstruation, hair loss, etc.) have been described as challenges to "body integrity", leading authors to propose the concept of "body deconstruction" (Piot-Ziegler et al., 2010).

Multiple sores in the mouth (canker sores), on the tongue, feet and hands colonise the body exposed to chemotherapy. Several women mentioned diarrhoea, vomiting and even alterations to their dentition. The idea of disfigurement is present when women talk about this painful time; their own appearance in the mirror is unbearable for them. This physical discomfort is so pervasive that some women cry out for death. Aline Sarradon-Eck explains that this physical discomfort, the change in body image and the disruption of social relationships lead to a fear of death or even social death (Sarradon, 2009). Dili recounts:

"My friend's little sister went abroad to be treated for cancer and when she came back she was completely disfigured, you don't even know if she's a human being or not (...) Especially when my hair completely fell out, it didn't suit me at all, I had completely lost it (...) I was even afraid to look at myself in the mirror" Dili, 43.

The cessation of menstruation (sometimes reversible after chemotherapy, but not always) is accompanied by the loss of plans for pregnancy and childbirth. The discussions in the interviews were full of issues relating to pregnancy, breastfeeding and cancer. This is particularly linked to the fact that women with breast cancer in Mali are particularly young, as mentioned above, and to the high total fertility rate of women in the country. The interviews revealed many delays and misdiagnoses related to pregnancy and breastfeeding, as well as painful stories of pregnancies being terminated in order to start treatment, and of abortions.

Applying the concept of 'comorbid suffering' previously developed by Weaver (2016) to breast cancer, Bosire (Bosire et al., 2020) described the way in which breast cancer in South Africa leads to women's isolation and social distance from family and community, with comorbid medical, social and financial problems contributing significantly to women's burden of illness. In Mali, we observed a social distancing linked to the economic cost of the disease. Some of the people around women move away and stop hearing from each other for fear of being asked to pay for treatment. This financial cost of the disease leads to isolation: the social cost of the economic cost of the disease in Mali.

During this period of pain and suffering, religion played an extremely important role in the acceptance of the ordeal of the illness. It was present in all the interviews, although it may have been less of a determining factor for some women from a higher socio-professional class (for example, a doctor): "I really loved my breasts and when I

saw them I was proud. I had beautiful breasts and everyone liked them. But if God has decided otherwise, I can only accept it" Nènè, 43. The importance of faith in the healing process of women with breast cancer has also been established in South Africa (Lambert et al., 2020).

3.2. Trouble in gender through masculinisation of the body and loss of femininity

In the interviews, the breast had an aesthetic/sexual function as well as a maternal/nutritional function through breastfeeding. Most of the women we met were young, and at their age it is socially expected that they should have sexual relations with their husbands and have children. Not being able to fulfil these functions makes them question their femininity: "For me, the breast itself is femininity; if a woman has no breast, she is not a woman" Antou, 35. The same link between loss of breast, loss of sexuality and loss of femininity was found among South African women (Lambert et al., 2020).

Two women spoke of the painful ordeal of having their bodies masculinised as a result of the treatment. One woman said that because she was bald, she was taken to the post-operative room reserved for men: "And the next day I was in the operating theatre from 10am to 12pm. After the operation, they wanted to take me to the men's ward, but my children said no, because I'm their mother (...) because I had no hair left" Jolie, 70 years old. Others spoke of having their breasts cut off: "A breast reduction takes away a woman's femininity (...) your breasts will look like a man's" Sali, 40 years old; "(...) it's as if you're no longer a woman" Sira, 43 years old. In Switzerland, the same feeling of loss of gender was expressed by women treated for breast cancer, with some feeling that their bodies had been masculinised, which had a strong impact on their gender identity. One woman even explained that she felt like she was going back to childhood, before her body was transformed by puberty (Piot-Ziegler et al., 2010). Women's entire identity is challenged by the fact that the diseased part of their body is highly symbolic (Piot-Ziegler et al., 2010).

Mastectomy is often accompanied by the removal of several lymph nodes under the arm, which sometimes leads to a loss of physical capacity or disability. Some of the women interviewed said that they could no longer sleep on their side, wash, carry, do the laundry or cook, which has an impact on a woman's social status. Indeed, several women expressed their sadness at not being able to cook, which in the Malian context represents a real loss of femininity, since in Mali femininity, cooking and sexuality are often closely linked (Fainzang and Journet, 1988). In the interviews, we also noted the ban on fire in the post-cancer period, which is linked to the impossibility of cooking:

"The breast that's been amputated, the arm that's over there, can't work. What's more, I can't go near the fire or the heat. I can't even take a kettle full of water. I haven't been able to cook since 2016. I'm in a big family, my husband has two other brothers and it's their wives who do the cooking" Sali, 40 years old.

Relatively taboo in the interviews, the women did not speak spontaneously about their sexuality but when the researchers posed the question, the women were prepared to answer, albeit rather succinctly. Many dismissed the question: "It hurts everywhere, you can't even think about it" Jolie, aged 70. In addition to the effects of chemotherapy, the loss of a breast has a direct impact on sexuality: "The breast can make intimacy between a man and a woman pleasant, but when you don't have a breast it can affect your intimacy" Adjara, aged 35. Some women explained that their husbands were afraid of sexual contamination from cancer or from amputated breasts, and felt a certain disgust:

"I know my husband loves me, but even when it comes to the marriage bed, you can feel that he's a bit crumpled. It's as if he's afraid to have sex with me. I asked him about it and he said it's true, when it comes to touching the amputated part, he seems a bit scared. That's why I want a breast reconstruction. I know that in time he will get

used to seeing me like this. And he even married another woman, claiming that I didn't have a boy and that I don't have many children" Adjara, 35; "African men have a real aversion to it. They don't even want to sleep with their wives because of the disease. They think they might be infected too" Lakaré, 46.

While some women spoke positively of their husbands, highlighting their financial and moral support, several also spoke of their husbands abandoning them and taking on a co-wife at the time of diagnosis. Women explained their husbands' abandonment after cancer diagnosis or amputation by fear of the high cost of treatment, the desire to have more children, or a diminished sexuality, as summarised by Lakaré: "Most men leave you because of your illness". We can see here that the loss of a woman's labour power and the loss of her sexual and reproductive capacity are accompanied by a loss of value in the material sense, with the husband often abandoning her, recalling the notion of "sexage" (Guillaumin, 1978).

In the interviews, there is an essentialisation of male sexuality, which is both a 'natural' physical need for men and a marital duty for women. In the interviews, a kind or understanding husband is one who does not force his wife to have sex. If the wife asks her husband to leave her alone during the treatments and he agrees, this is perceived as kindness on the part of the husband: "Since my breast was amputated, I've had no feelings. I was also scared during the treatment, so I asked him to leave me alone during the treatment. He accepted that. Because he has other wives too, I didn't tell you that he has 3 or 4 wives" Dili, aged 43. Many women have attributed the cause of their cancer to stress and men, denouncing the negative effects these have on their wellbeing and highlighting the "pathogenic potential of gender" (Meidani and Ales-sandrin, 2019):

"For a woman to be more beautiful, the breasts count for a lot. Some women feel a little diminished. But I think it's better to amputate it to stop the disease than to leave it and let it get worse. But you can live with an amputated breast if you find an understanding husband, but in Mali it's the men who cause cancer in women (...) Because it's not easy for a woman to take care of her whole family alone. All our diseases are caused by stress" Lakaré, 46.

At the same time, however, as they denounce their family and domestic burdens, they describe with pain the loss of some of their typically feminine functions, such as cooking, as described above. In the specific case of cooking, as in the case of sexuality, we found that other women (especially co-wives who were already present at the time of diagnosis or who had been taken over) replaced this physical incapacity, filling the void left by the woman. In this case, we are witnessing the continuity of gender relations rather than any possible subversion.

A team of Malian surgeons began training in breast reconstruction in 2012, thanks to a partnership with the Montpellier Cancer Institute in France. There are structural obstacles to the development of this activity (cost of the operation for women and their families, poor state of the operating theatres in hospitals, lack of prostheses in the country), but five surgeons at the Point G University Hospital in Bamako offer breast reconstruction to women. In interviews, several women expressed interest in this surgery:

"I have inflatable bras and they are good. I wear these bras and put cotton inside. I went to say hello to my husband's older brother and when my sister-in-law saw me she said they'd made me a new breast. I told her no, that I'd just put cotton in my bra. But if [a surgeon] had taken part of my thighs or buttocks and made a breast out of them, I'd be happy. If I had prostheses from abroad, I'd be happy" Nènè, 43.

However, rumours about prostheses (danger, incompatibility of plastic with heat) also explain why some women reject the idea out of hand. Ambivalence towards surgical reconstruction was also described in Switzerland (Piot-Ziegler et al., 2010). Women expressed that the reconstructed breast would be a strange object that would maintain their

social appearance but would never restore their physical integrity or replace their lost femininity. The majority of women in Mali use filling strategies (with wigs during chemotherapy, cotton prostheses to cover the missing breast and/or langanas, scarves for the upper part of the body), for covering or revealing the body depending on the space. This adaptation of clothing allows women to escape the gaze of others and the discrimination described above women by conforming to societal expectations of feminine appearance.

3.3. Resistance through sorority, discreet mobilisation and exposure of scars

For the women we met, the experience of breast cancer and the reconstruction of their bodies and identities was strongly influenced by other women and patient associations. We use here the concept of 'reconstruction' as defined by Greco: "The concept of reconstruction is not limited to surgical practice, but includes the acceptance of a different body and also a different life, modified by the experience of illness" (Greco, 2016a). The mourning processes described above are long and painful, but then we see acceptance and resignation on the part of the women, who recall their past with pride and emphasise their courage, even if nostalgia is present when they remember their lost breast and the carefree days before the cancer:

"It made me even prouder, especially when you see the courage with which I endured it. I lost my hair when I was doing my ablutions. And I told my husband that we've become the same (*laughs*). And he took a photo of me. And he sent my photo to my childhood friend" Nènè, 43.

The role of other women in the lives of these women with cancer was very evident in the interviews. Firstly, their peers, their sisters, provide considerable support and help in terms of practical, material and financial assistance. Many women were able to access treatment thanks to the financial support of their sister(s). Other women who are ill also play a very important role in hospital waiting rooms and (shared) chemotherapy rooms. These moments of sharing experiences of illness create very strong relationships that help patients to come to terms with their illness and rebuild their lives. There is a real sense of mutual encouragement among these women. These discussions are also very important for the exchange of information at a time when secrecy and taboos characterise the medical care of these women and, more generally, cancer in Mali (Kane and Guindo, 2021). The taboos surrounding breast cancer in particular, and women's bodies in general, have the perhaps unexpected effect of creating resistance and solidarity. In these spaces, we see strategies for circumventing the fact that women are kept in the dark about their own bodies (Tabet, 2004). On the subject of surrogate motherhood in India, Amrita Pande shows how gestational carrier dormitories become "avenues of resistance" (Pande, 2010, p. 985) to doctors and intended parents, and a space for sorority. Amrita Pande speaks of "discursive resistance" (Pande, 2010, p. 985), which could also be described as 'discreet mobilisation' (Diallo, 2021).

The interviews revealed that access to information helps women to accept treatment (mastectomy and chemotherapy) and that it is important to be able to name the cancer:

"In the chemotherapy room we talked to each other. A woman who had already had her breast amputated came to see us and reassured us that it wasn't serious at all. The conversations we had in the chemo room really helped me to accept my fate; I understood that it's all a question of destiny. That's why I have the courage to fight cancer. Even in the chemo room, we started teasing each other, saying that if you don't have hair, you won't have a husband. I'm a funny person by nature, so I like to tease people all the time. And when my hair fell out, they teased me and said I wouldn't have a husband either. So I was psychologically ready before the day of my

operation. And on the day of the operation, I went out on my own" Tou, 49.

The role of co-wives seems ambiguous in this research. While their reaction is often feared by the ill woman, who does not want to reveal her illness to them, in the end the co-wives often appear supportive and benevolent. It is possible that the ill woman's loss of many feminine attributes downgrades her (outside the 'woman' category) so that she is no longer a 'threat' to the co-wives, who no longer see her as a rival:

"It was my husband who informed [my co-wife]. There were disagreements between her and me, we didn't speak. She didn't even want to come and see me, and the day she did, she came and found my head shaved and started crying. And from that day on, there have been no problems between us", Sali, 40 years old.

Women often talked about the internet and social networking sites (snapchat and whatsapp) as a means of communicating with other women and showing off their bodies in the post-cancer period. This exhibition of the body and scars is also very present in the women's accounts of their experiences within the associations. Mockery, teasing, resignation, laughter and derision characterise these interactions:

"I don't have a problem with that. And even in the group we tease each other: 'You've only got one breast'. We joke that the woman whose breasts are cut off will get a divorce, because Mrs X's husband is the husband of all the women whose breasts are cut off [*laughs*]". Satourou, 56.

In many of the interviews, the women said that they regularly displayed their bodies in an ironic or playful way: "I even did a little comedy with them at the end. I ask whoever wants to see my breasts to give me 100 francs and I show them", Dili, 43. This display of the body was also present in our own interactions with the women. Irrespective of the researcher conducting the interviews (of different genders, ages and backgrounds), many of the women spontaneously displayed their scars to show us and thus bear physical witness to their story, with an underlying request for recognition of the pain and ordeal experienced through the eyes of the other: "I like to tell my family, when I'm getting ready and someone says: 'You're well dressed', I say: 'Yes, really, my only breast is really well dressed'". Sali, aged 40. These exhibitions can be understood as 'acts of resistance' in their management of asymmetry (Greco, 2016b) and perfectly illustrate the interdependence of identity and the body described by Fortier (2022), particularly during the period of reconstruction and self-assertion. The body is taken up by the women as a materiality that allows them to reconstruct themselves in the eyes of the other. We are witnessing the construction of a discourse, a staging of oneself, one's body and one's experiences, which echoes the figure of the Amazon, staged in France with a capable, desirable and powerful body, as described in the introduction. Froidevaux-Metterie evokes the performativity of breasts (Froidevaux-Metterie, 2020); in the discourse of these women and their exhibition practices, it is clear that these breasts, but also their absence and the scars left by their removal, carry the capacity to transform the relationship with oneself and with others.

4. Conclusion

The lives of the women we met were marked by different stages: the shock of the announcement, mourning, suffering and then rebuilding the self. These young women, often pregnant or breast-feeding and with young children, were initially stunned and sometimes lost their way. The announcement of the need to amputate the breast highlights all the feminine characteristics it conveys: the sensual breast (beauty, sexuality), the removal of which largely undermines the erotic capital of these women (Hakim, 2010); the nurturing breast (breastfeeding), a symbol of maternity, which sometimes leads to abandonment. Second, notions of grief and suffering characterise the chemotherapy period, confirming that the body image after breast cancer is not only altered by

breast surgery (Brédart et al., 2007) and that other effects, such as hair loss, can alter this body image and women's self-esteem at this time just as much, if not more (Lambert et al., 2020). This period of mourning marks a biographical break in these women's bodies and lives, with a 'before' and an 'after' cancer (Sarradon, 2009). Finally, these women's identities are reconstructed in the post-cancer period, often through the staging of their bodies and the performativity of bodies and gender (Butler, 2006).

Breast cancer in Mali leads to gender confusion, with female identity undermined by the masculinisation of the body and the inability of sick women to fulfil the roles assigned to them by society. However, by filling the void left by their amputated breasts to conform to social expectations and by transferring feminine tasks to other women, we observe a continuity of gender relations. The resistance observed through sorority, discreet mobilisation and display of the body does not seem to be part of a renegotiation of gender relations, but it does play an active role in women's acceptance of the disease and their reconstruction.

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The research protocol was ethically approved by the ethics committee of the Institut National de Santé Publique - INSP in Bamako (Decision N°17/2021/CE-INSP of October 26, 2021). All the interviews were conducted after the women had given their consent, which was given by signing a consent form that had been read and approved by the participant. All audio recordings and transcribed interviews were also pseudonymised.

CRediT authorship contribution statement

Clémence Schantz: Conceptualization, Formal analysis, Funding acquisition, Investigation, Methodology, Project administration, Supervision, Validation, Writing – original draft. **Abdourahmane Coulibaly:** Formal analysis, Investigation, Writing – review & editing. **Kadiatou Faye:** Resources, Supervision, Validation. **Drissa Traoré:** Writing – review & editing, Resources, Supervision, Validation.

Declaration of competing interest

None.

Data availability

Data will be made available on request.

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References

- Bagnan-Tonato, J., Lokossou, M., Gnangnon, F., Akouala, G.P., Mehinto, D.K., Olory Togbé, J.L., Lokossou, A., Perrin, R.X., 2017. Les cancers du sein hormono dépendants au Bénin. *Carcinologie Clinique en Afrique* 16 (2), 15–20.
- Black, E., Richmond, R., 2019. Improving early detection of breast cancer in sub-Saharan Africa : why mammography may not be the way forward. *Glob. Health* 15 (1), 3. <https://doi.org/10.1186/s12992-018-0446-6>.
- Bosire, E.N., Mendenhall, E., Weaver, L.J., 2020. Comorbid suffering : breast cancer survivors in South Africa. *Qual. Health Res.* 30 (6), 917–926. <https://doi.org/10.1177/1049732320911365>.
- Bove, R.M., Vala-Haynes, E., Vaggia, C., 2014. Polygyny and women's health in rural Mali. *J. Biosoc. Sci.* 46 (1), 66–89. <https://doi.org/10.1017/S0021932013000059>.
- Brédart, A., Swaine Verdier, A., Dolbeault, S., 2007. Traduction/adaptation française de l'échelle "Body Image Scale" (BIS) évaluant la perception de l'image du corps chez des femmes atteintes de cancer du sein. *Psycho-Oncologie* 1 (1), 24–30. <https://doi.org/10.1007/s11839-007-0001-9>.
- Butler, J., 2006. *Trouble dans le genre : Le féminisme et la subversion de l'identité*. Éditions La Découverte.
- Clair, I., 2016. Faire du terrain en féministe. *Actes de la recherche en sciences sociales* 213 (3), 66. <https://doi.org/10.3917/arss.213.0066>.
- Diallo, A.M., 2021. La mobilisation à bas bruit des acteurs communautaires de santé au Sénégal : Engagements bénévoles et aspirations professionnelles 382 [These de doctorat, Université de Lille (2018-2021)]. <https://www.theses.fr/2021LILUA013>.
- Diarra, A., 2021. "Il ne faut pas qu'on te mette le couteau dedans !" L'épreuve de la guérison du cancer du sein au Mali. In: Desclaux-Diara, A., Aïssa, Musso, Sandrine (Eds.), *Guérir en Afrique*. L'Harmattan, pp. 129–147.
- Dorlin, E., 2005. De l'usage épistémologique et politique des catégories de « sexe » et de « race » dans les études sur le genre. *Cahiers du Genre* 39 (2), 83–105.
- Douglas, M., 1967. *De la souillure. Essai sur les notions de pollution et de tabou*. Éd. la Découverte & Syros.
- Fainzang, S., Journet, O., 1988. La Femme de mon mari. *Anthropologie du mariage polygamique en Afrique et en France* 30. Persée - Portail des revues scientifiques en SHS. https://www.persee.fr/doc/hom_0439-4216_1990_num_30_114_369252.
- Fortier, C., 2021a. Seins, reconstruction, et féminité. Quand les Amazones s'exposent. *Droit et cultures. Revue internationale interdisciplinaire* 80. Article 80. <https://journals.openedition.org/droitcultures/6721>.
- Fortier, C., 2021b. Vers une reconnaissance des corps-identités. Excisées, amazones, intersexes, trans, et sourds. *Droit et cultures. Revue internationale interdisciplinaire* 80. Article 80. <https://journals.openedition.org/droitcultures/6675>.
- Fortier, C., 2022. Le corps de l'identité : Transformations corporelles, genre et chirurgies sexuelles (Karthala).
- Frieden, M.-C., Graber, N., M'Zoughi, M., 2018. Introduction. Les maladies chroniques dans les Suds. Expériences, savoirs et politiques aux marges de la santé globale. *Emulations - Revue de sciences sociales* 27, 10.
- Froidevaux-Metterie, C., 2020. Seins : en quête d'une libération. *Anamosa* 221.
- Gaitanidis, A., Alevizakos, M., Tsilikidis, C., Tsaroucha, A., Simopoulos, C., Pitiakoudis, M., 2018. Refusal of cancer-directed surgery by breast cancer patients : risk factors and survival outcomes. *Clin. Breast Cancer* 18 (4). <https://doi.org/10.1016/j.clbc.2017.07.010> e469-e476.
- Giaquinto, A.N., Miller, K.D., Tossas, K.Y., Winn, R.A., Jemal, A., Siegel, R.L., 2022. Cancer statistics for african American/Black people 2022. *CA A Cancer J. Clin.* 72 (3), 202–229. <https://doi.org/10.3322/caac.21718>.
- Global Cancer Observatory, 2022. *Breast* [Fact Sheets]. IARC/OMS.
- Greco, C., 2016a. La reconstruction du sein en cancérologie et en chirurgie esthétique : Une analyse sociologique comparée. *These de doctorat, Paris, EHESS*. <https://theses.s.fr/2016EHES0052>.
- Greco, C., 2016b. Vivre avec un corps asymétrique. Mastectomie, résistances et réappropriation. *Cahiers du Genre* 60 (1), 81–99.
- Grosse Frie, K., Kamaté, B., Traoré, C.B., Ly, M., Malla, B., Coulibaly, B., Wienne, A., Kantelhardt, E.J., 2018a. Factors associated with time to first healthcare visit, diagnosis and treatment, and their impact on survival among breast cancer patients in Mali. *PLoS One* 13 (11), e0207928. <https://doi.org/10.1371/journal.pone.0207928>.
- Grosse Frie, K., Samoura, H., Diop, S., Kamate, B., Traore, C.B., Malle, B., Coulibaly, B., Kantelhardt, E.J., 2018b. Why do women with breast cancer get diagnosed and treated late in sub-saharan Africa perspectives from women and patients in Bamako, Mali. *Breast Care* 13 (1), 39–43. <https://doi.org/10.1159/000481087>.
- Guillaumin, C., 1978. *Pratique du pouvoir et idée de Nature* (1) L'appropriation des femmes. *Questions Féministes* 2, 5–30.
- Hakim, C., 2010. Erotic capital. *Eur. Socio Rev.* 26 (5), 499–518. <https://doi.org/10.1093/esr/jcq014>.
- Hamarat, N., 2021. (Se) Mobiliser autour des transformations du corps suite à la maladie grave. Le cas des associations de femmes atteintes de cancer du sein. *Droit et*

- cultures. *Revue internationale interdisciplinaire* 80. Article 80. <https://journals.openedition.org/droitcultures/6422>.
- INCa, 2021. *Pratique de la reconstruction et réparation mammaire en France, une analyse des données en vie réelle* (Les données, p. 16 [Fiche analyse].
- Institut National de la Statistique (INSTAT), 2019. Cellule de Planification et de Statistique Secteur Santé-Développement, Social et Promotion de la Famille (CPS/SS-DS-PF), & ICF. Enquête Démographique et de Santé au Mali 2018 643. <https://dhsprogram.com/publications/publication-FR358-DHS-Final-Reports.cfm>.
- Joko-Fru, W.Y., Miranda-Filho, A., Soerjomataram, I., Egue, M., Akele-Akpo, M.-T., N'da, G., Assefa, M., Buziba, N., Korir, A., Kamate, B., Traore, C., Manraj, S., Lorenzoni, C., Carrilho, C., Hansen, R., Finesse, A., Somdyala, N., Wabinga, H., Chingonzoh, T., et al., 2020. Breast cancer survival in sub-Saharan Africa by age, stage at diagnosis and human development index : a population-based registry study. *Int. J. Cancer* 146 (5), 1208–1218. <https://doi.org/10.1002/ijc.32406>.
- Joyce, R.A., 2005. Archaeology of the body. *Annu. Rev. Anthropol.* 34 (1), 139–158. <https://doi.org/10.1146/annurev.anthro.33.070203.143729>.
- Kane, H., Guindo, A., 2021. Les mots à ne pas dire : Relation de soins et communication en oncologie pédiatrique. *Anthropologie et Santé* 23 <https://doi.org/10.4000/anthropologiesante.9930>.
- Lambert, M., Mendenhall, E., Kim, A.W., Cubasch, H., Joffe, M., Norris, S.A., 2020. Health system experiences of breast cancer survivors in urban South Africa. *Women's Health* 16, 1745506520949419. <https://doi.org/10.1177/1745506520949419>.
- Lapôtre-Ledoux, B., Benedicte, L.-L., Dantony, E., Grosclaude, P., Molinié, F., Woronoff, A.-S., Lecoffre-Bernard, C., Lafay, L., Defossez, G., D'Almeida, T., 2023. Incidence des principaux cancers en France métropolitaine en 2023 et tendances depuis 1990. *BEH*, 12-13, pp. 188–204.
- Laqueur, T.W., 2013. *La fabrique du sexe : Essai sur le corps et le genre en Occident*. Gallimard.
- Lock, M., 1993. Cultivating the body : anthropology and epistemologies of bodily practice and knowledge. *Annu. Rev. Anthropol.* 22, 133–155.
- Lokossou, M., Tshabu-Aguenon, C., Bagnan-Tonato, A., Lokossou, A., Denakpo, J., Akpo-Akele, M., Lokossou, A., Perrin, R., 2017. Cancer mammaire dans le Département du Littoral au Bénin. *Carcinologie Clinique en Afrique* 16 (2), 26–33.
- Lorde, A., 2020. *The Cancer Journals* (1er Édition). Penguin Classics.
- Meidani, A., Alessandrin, A., 2019. Quand le cancer rencontre le genre. *Rev. Fr. Sociol.* 60 (2), 201–224.
- Miselli, 1998. *Citadines. Vies et regards de femmes de Bamako* (ONG Miseli). Imprim Color 210. <https://www.abebooks.com/CITADINES-VIES-FEMMES-BAMAKO-MISELI-ONG/16698060892/bd>.
- Nédélec, E., 2023. *Cancers féminins en Côte d'Ivoire : Une anthropologie des trajectoires de soin et de la prise en charge biomédicale à Abidjan* [Ecole doctorale Sociétés, Politiques et Santé Publique Spécialité Anthropologie sociale – Ethnologie]. Université de Bordeaux.
- Pande, A., 2010. Commercial surrogacy in India : manufacturing a perfect mother-worker. *Signs: J. Wom. Cult. Soc.* 35 (4), 969–992. <https://doi.org/10.1086/651043>.
- Parkin, D.M., Jemal, A., Bray, F., Korir, A.R., Kamaté, B., Singh, E., Joko, W.Y., Sengayi-Muchengeti, M., Liu, B., Ferlay, J., 2019. *Cancer in Sub-saharan Africa*, vol. III. Union for International Cancer Control, p. 302.
- Piot-Ziegler, C., Sassi, M.-L., Raffoul, W., Delaloye, J.-F., 2010. Mastectomy, body deconstruction, and impact on identity : a qualitative study. *Br. J. Health Psychol.* 15 (3), 479–510. <https://doi.org/10.1348/135910709X472174>.
- Sarradon, A., 2009. In: Cousson-Gélie, F., Langlois, Emmanuel, Barraut, Marion (Eds.), *Le cancer comme inscription d'une rupture biographique dans le corps. Faire Face au cancer*, Tikinagan, pp. 285–311. *Image du corps, Image de soi*.
- Schantz, C., Coulibaly, A., Traoré, A., Traoré, B.A., Faye, K., Robin, J., Teixeira, L., Ridde, V., the SENOVIE group, 2024. Access to Oncology Care in Mali: A Qualitative Study on Breast Cancer. *BMC Cancer* 24 (1), 81. <https://doi.org/10.1186/s12885-024-11825-6>.
- Schantz, C., Diarra, I., Traoré, A., Traoré, B.A., Chabrol, F., Sogoba, S., 2022. Radiothérapie et lutte contre les cancers : Défis de maintenance de l'unique accélérateur linéaire à l'Hôpital du Mali. *Sante Publique* 34 (3), 425–428.
- Sutter, S.A., Slinker, A., Balumuka, D.D., Mitchell, K.B., 2017. Surgical management of breast cancer in Africa : a continent-wide review of intervention practices, barriers to care, and adjuvant therapy. *J. Global Oncol.* 3 (2), 162–168. <https://doi.org/10.1200/JGO.2016.003095>.
- Tabet, P., 2004. *La grande arnaque : Sexualité des femmes et échange économique-sexuel*. Harmattan.
- Togo, A., Traoré, A., Traoré, C., Dembélé, B.T., Kanté, L., Diakité, I., Maïga, A., Traoré, S. O., Coulibaly, A.C., Diallo, G., 2010. Cancer du sein dans deux centres hospitaliers de Bamako (Mali) : Aspects diagnostiques et thérapeutiques. *J. Africain du Cancer/Afr. J. Cancer* 2 (2), 88–91. <https://doi.org/10.1007/s12558-010-0060-x>.
- Tong, A., Sainsbury, P., Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ) : a 32-item checklist for interviews and focus groups. *Int. J. Qual. Health Care: J. Int. Soc. Quality in Health Care* 19 (6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>.
- Traoré, D., Bengaly, B., Kanté, S., Sanogo, S., Ouattara, D., Traoré, I., Togola, B., Coulibaly, B., Dicko, M., Ongoïba, N., 2022. Cancers du sein chez la femme : Incidence et caractéristiques épidémiocliniques au CHU Point G. *J. Afr. de Chirurgie* 7 (2), 103–107.
- USAID, 2019. *Mali Country Profile Fact Sheet*. USAID [Briefing Book]. <https://www.usaid.gov/mali/fact-sheet/mali-country-profile>.
- Verges, F., 2019. *Un Féminisme Décolonial* (La Fabrique).
- Weaver, L.J., 2016. Transactions in suffering : mothers, daughters, and chronic disease comorbidities in New Delhi, India. *Med. Anthropol. Q.* 30 (4), 498–514. <https://doi.org/10.1111/maq.12283>.
- Weber, M., 1995. *Economie et Société 1. Les catégories de la sociologie* (Pocket).
- Wondimagegnehu, A., Teferra, S., Assefa, M., Zebrack, B., Addissie, A., Kantelhardt, E.J., 2024. How can a woman live without having a breast? » : challenges related to mastectomy in Ethiopia. *BMC Cancer* 24 (1), 60. <https://doi.org/10.1186/s12885-023-11801-6>.
- Zwane, D., 2021. "Our beauty is in our breasts" : a culture-centered approach to understanding cancer perceptions in kwa Zulu natal, South Africa. *Qual. Health Res.* 31 (1), 148–159. <https://doi.org/10.1177/1049732320960417>.