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Endogenous solutions to support of interventions aimed at improving female sexual and reproductive health in the Sahel

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Résumé

Au Sahel, l'accès et l'utilisation des services de santé sexuelle et reproductive pour les femmes, les mères et les adolescentes sont soumis à trois freins structurels : les écarts dans la mise en œuvre des programmes de santé, les idéologies de référence des acteurs, et enfin les crises sanitaires, migratoires, sécuritaires et économiques. La haute prévalence des mariages précoces et des avortements provoqués clandestins témoigne de l'imbrication de ces facteurs, et de formes particulières de violences faites aux femmes. Toutefois, en dépit de ces trois freins et des problèmes qu'ils engendrent, on note l'existence de solutions endogènes (SE) positifs produites sur le terrain. Cet article tend à examiner ces SE élaborées par des acteurs œuvrant à l'interface des programmes de santé et des points de délivrance des services relatifs à la santé sexuelle et reproductive féminine (SSRF) au Mali, au Niger et en Mauritanie.

À partir d'une méthodologie qualitative, nous examinons les SE dans le fonctionnement quotidien des structures sanitaires qui offrent des services de santé sexuelle et reproductive féminine à travers divers domaines : organisation des soins, ressources humaines et du matériel. En améliorant ces domaines de gouvernance, les SE contribuent fortement à une meilleure performance du système de santé.

Nous proposons in fine un modèle de prise en compte des SE dans les stratégies d'amélioration de l'offre de santé, la phase de validation par des experts évaluateurs devant être incontournable.

Mots-clés : solution endogène, experts contextuels, santé sexuelle et reproductive féminine, Sahel.

Abstract

In the Sahel, access to and use of sexual and reproductive health services by women, mothers, and adolescent girls are subject to three structural obstacles: implementation gaps in health programmes, the conceptual framework of stakeholders, and health, migration, security, and economic crises. The high prevalence of early marriages and covertly performed abortions are indicative of the interaction of these three factors, and of the various forms of violence against women. However, despite these three constraints and the problems they create, there are positive endogenous solutions (ES) produced on the ground. This article examines the ESs that have been developed by health personnel working at the interface between health programmes and service providers for female sexual and reproductive health (FSRF) in Mali, Niger, and Mauritania. Using a qualitative methodology, we examine ESs in the day-to-day functioning of health facilities providing FSRH services across various areas of governance: organization of care, human resources, and materials. By improving these areas of governance, ESs contributes significantly to improved health system performance.
Finally, we propose a model for integrating ESs into strategies for improving healthcare services, the validation phase by expert evaluators being essential.

Keywords: endogenous solution, contextual experts, female sexual and reproductive health, Sahel.

List of acronyms

BI: Bamako initiative
DH: district hospital
DMT: district management team
ES: endogenous solution
FG: focus group
FP: family planning
FSRH: female sexual and reproductive health
HD: health district
HU: health unit
IGA: income-generating activities
IHC: integrated health centre
INN: international non-proprietary name
OP: obstetric package
MCH: maternal and child health
MDG: Millennium Development Goals
NGO: non-governmental organization
PMTCT: prevention of mother-to-child transmission
PNC: pre-natal consultation
PHC: primary healthcare
RH: reproductive health
SDG: Sustainable Development Goals
SRHAY: sexual and reproductive health of adolescents and youth

Endogenous solutions to support interventions aimed at improving female sexual and reproductive health in the Sahel

Introduction

The management of female sexual and reproductive health (FSRH) in Mali, Niger, Mauritania, and throughout the Sahel, is hampered by critical needs and a shortage of resources, as well as by three structural obstacles: (a) implementation gaps in health programmes, (b) the conceptual framework of stakeholders, and (c) health, migration, security, and economic crises. The high prevalence of forced marriages and covertly performed abortions are indicative of the interaction of these three factors and of the various forms of violence against women.

Many of the public health policies addressing these issues have been formulated and implemented throughout the distant reaches of the developing world by public and private international development aid organizations in the form of standardized models. These "traveling models" [1] are the brainchild of technical experts and social scientists who have had little concern for local realities and the socio-cultural and economic contexts that concern them. These models are instead based on a mostly Western-centric view of good governance, which asserts that what works in one location should also work elsewhere, as if the characteristics shared among developing countries would suffice to justify such a claim. Such turnkey solutions conceptualised, designed, and implemented without paying any heed to local specificities, fail to account for the implementation gaps of public policies. These implementation gaps draw attention to unforeseen consequences and the pivotal role that local players play in the accomplishment or failure of the set objectives[2,3,4,5], or in reaching unexpected outcomes. Models that have allegedly been expertly designed are, during their implementation, frequently subject to reinterpretation, fragmentation, selection, deviation from their initial goals, or, to put it another way, constitute an "inextricable jumble of manipulations, improvisations, renunciations, resistances, negotiations, arrangements, deceptions, and compromises"[6].

In the end, despite the progress that has been made, significant health disparities continue to prevail between the countries of the South and those of the North. At the conclusion of the Millennium Development Goals (MDG), maternal mortality rates in sub-Saharan Africa had decreased, but less than in developed regions, dropping by 45 % (from 987 to 546 per 100,000 live births) as opposed to 48 % (from 23 to 12 cases per 100,000 live births) between 1990 and 2015[7]. The adoption of the Sustainable Development Goals (SDG) has not yet led to improved maternal health indicators, as shown by relatively more recent figures with sub-Saharan Africa accounting for 66 % of the estimated number of global

[1] Jean-Pierre OLIVIER DE SARDAN, Aïssa DIARRA, Mahaman MOHA. Traveling models and the challenge of pragmatic contexts and practical norms: the case of maternal health.

[2] Jean-Pierre OLIVIER DE SARDAN and Valéry RIDDE. *Une politique publique de santé et ses contradictions*.

[3] Jacqueline IGUENANE. Implantation de programmes d'éducation thérapeutique de patients vivant avec le VIH dans quatre pays à ressources limitées. Approche évaluative.

[4] Annita HARDON . . La lutte contre l'épidémie de VIH/Sida en Afrique subsaharienne : les politiques à l'épreuve de la pratique..

[5] Aissa DIARRA. Socio-anthropologie de la prise en charge de l'accouchement au Mali.

[6] Jean-Pierre OLIVIER DE SARDAN. *La revanche des contextes*.

[7] https://www.who.int/en/news/item/12-11-2015-maternal-deaths-fell-44-since-1990-un

maternal deaths in 2017[8]. In this same region, women had a one in 12 probability of dying during pregnancy or childbirth, compared to a one in 4,000 probability in wealthy countries. Abortion-related deaths contribute significantly to maternal mortality and are a serious public health problem. While Africa accounts for 29 % of all unsafe abortions, 62 % of abortion-related deaths occur in Africa[9]. Adolescent girls have difficulty avoiding unwanted pregnancies because contraceptives are hard to get. In sub-Saharan Africa, the birth rate among adolescent girls is about 101 births per 1,000 women[10]. This health situation is indicative of the many functional flaws of public health services. The routine behaviour of health providers (their petty corruption, condescending attitude toward ordinary patients, frequent absences, rejection of assignments in rural areas) [11] deters people from seeking sexual and reproductive health services.

These functional flaws should not, however, overshadow certain positive initiatives, which we refer to as "endogenous solutions" (ES), like those put forth by certain healthcare workers, who, driven by their ingenuity, resourcefulness, and well-meaning attitude, must deal with the tremendous challenges resulting from the complexity and weaknesses of the health systems in which they work. These healthcare workers have the hard task of setting up "traveling models" that, although ill-defined and sometimes inconsistent, they try to adapt to situational realities and find solutions that fit within the organisational routines of health structures. They are also ones who, thanks to their in-depth understanding of local contexts, are innovators who seek to surpass the additional constraints brought about by external forces that have infiltrated the functioning of health systems. Finally, these health workers are the ones who, by trying to apply the plethora of protocols that regulate any new health programme, come up with appropriate user guidelines compatible with professional standards.

This article examines the ESs that have been developed by professionals working at the interface between health programmes and service providers for female sexual and reproductive health (FSRF) in Mali, Niger, and Mauritania. How are FSRF programmes implemented in "real life" health services? How is the clash managed between the professional approach of healthcare providers on one hand, and the socio-cultural norms of the communities and their financial constraints on the other? To what extent do ESs created by health workers take women's expectations into account? What are the unexpected consequences of this? The answers to these queries, which are covered in greater detail in the following sections, should point to the significance of the "bottom-up perspective" when addressing the health issues in the countries of the South. We believe that when changes are based on a strategic utilisation of various ESs, they are more likely to be effective and sustainable. This effect also holds true for the design and implementation strategies of health programmes, as well as their follow-up, evaluation, and results.

By endogenous solutions,[12] we refer to any strategy developed and implemented by local personnel ("contextual experts"[13]), which attempts to solve problems compromising the delivery of quality health services for all. This definition ricochets off the theory of "endogenous development", which emerged in the 1970s in opposition to "exogenous development". This latter term was restrictive and underestimated local capacities, as it gave outsiders the power to manage and control developmental practices and their implementation[14]. "Endogenous development" is consequently synonymous with "alternative development" and describes what is accomplished by communities themselves as seen from

[8]Evolution of maternal mortality 2000–2017. Estimates from WHO, UNICEF, UNFPA, World Bank Group and United Nations Population Division

[9]WHO, 2016

[10]United Nations Department of Economic and Social Affairs. World Population Prospects, 2019 Revision: Age-specific fertility rates by region, subregion and country, 1950-2100 (births per 1,000 women) Estimates. Online Edition [cited 2021 Dec 10]. Available at: https://population.un.org/wpp/Download/Standard/Fertility/

[11]Jean-Pierre OLIVIER DE SARDAN, Adamou MOUMOUNI, Aboubacar SOULEY. "L'accouchement c'est la guerre", Accoucher en milieu rural nigérien.

[12] *Gennân* in Greek which means "to engender", "which is born from within".

[13]We will call them "contextual experts", a term that we have taken from Jean-Pierre Olivier DE SARDAN (cf. Jean-Pierre Olivier DE SARDAN, *La revanche des contextes.* p.413

[14]Bill SLEE. endogenous development; a concept in search of a theory.

within, formulated on modes of development poles apart from contemporary Western approaches and based on the recognition of internal capacities[15]. This meaning has long been expressed by Oscar Pino Santos:

> "*This theory quickly scored many points, especially when it immediately attacked the currents of thought referring to the "stages of growth", which, like the model it sought to emulate, strove to mimic the trajectory of developed capitalist societies in an effort to catch up with them. This objective was vigorously challenged because it was unattainable due its presumptuous, pseudo-scientific, and historically based premises. The theory of endogenous development, in the fullest sense of the term, has come out not only against dependence, but also proposes an internal development strategy based on the maximum development of each country's unique resources and aimed toward meeting its population's basic needs."*[16]

As regards to this developmental approach, where the fields of economics and geography converge, studies on territorial dynamics place a strong emphasis on the spatial aspect of its physical deployment without however ignoring the human element. This dual spatial and human dimension, reported in numerous papers[17,18,19], is a conceptual feature of endogenous development, but it has been primarily circumscribed to the micro-level (cities, localities, health districts, local communities, businesses, public and private health facilities, etc.), or, at its most, to the medial level (countries, governments, ministries, regional communities, humanitarian NGOs).

In the same vein, we can cite the studies carried out on endogenous knowledge, referred to as "localised knowledge", an expression used by Lazare Séhouéto[20] who offered a definition which states that "(…) *in the realm of agriculture, peasants regularly produce and/or assimilate new knowledge that they transmit, through their modes of expression and means of dissemination, to specific cognitive and cultural schemas, to their own social logics."*[21]. The endogeneity of knowledge does not imply that this knowledge is isolated from exogenous systems, but that it is rather a component of practical knowledge, and its underlying rationales are "(…) *highly variable. Some are more 'technical', while others are more magico-religious. But they all stem from a fundamentally popular pragmatic approach"*[22]. The term "neo-endogenous development" has been put forth to describe the recognition of the positive influence of exogenous factors in the emergence of local knowledge[23]. But the bottom-up perception of development has not focused, as we have done, on ESs in the public sector and, more notably, in healthcare services. These ESs nevertheless do exist but remain ignored by transnational and national public action. As relations of power remaining highly imbalanced, the identification of needs and strategic responses remains in the hands of "outsiders" who strive to appear less authoritative to "insider" followers. We will illustrate this observation through the analysis of three strategic developments that have marked the evolution of public health policies in low-income countries: primary healthcare (PHC), the Bamako Initiative (BI), and targeted exemptions from basic healthcare payments.

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[15]Kun ZHANG, Hailin SHANG. The endogenous development of pastoral society: an anthropological case study in East Ujimqin Banner in Inner Mongolia.

[16] Oscar PINOS SANTOS. Développement endogène et Nouvel ordre économique international : genèse, situation actuelle et perspectives . p. 221-242.

[17] Le THANH KHOI. Culture et développement.

[18] Lazarus RAMANDEI . Endogenous development approach in development customary territories in Papua province (a critical theory).

[19]Charles MOUMOUNI, Carole NKOA. Le double langage du NEPAD.

[20]Lazare SEHOUETO. Savoirs agricoles localisés et production vivrière en Afrique subsaharienne.

[21]Idem. p.129

[22]Jean-Pierre OLIVIER DE SARDAN. *Anthropologie et Développement*. p.145

[23]Jane ATTERTON, Robert NEWBERY , Gary BOSWORTH , Arthur AFFLECK. Rural enterprise and neo-endogenous development.

The PHC founding principle based on universal healthcare states that the right to healthcare was to be guaranteed to all by the year 2000[24]. PHC takes a holistic view of health that places equal value on curative therapies, prevention, hygiene, and health education. In concrete terms, it has been the cornerstone of the development of health systems whose primary goal is to extend essential healthcare services to all people at an affordable cost. Countries have been urged to ensure the financing of their national health systems and play a prominent role in the provision of healthcare services. This has been exemplified with ground-breaking accomplishments in China and Cuba[25]. We have seen an increase in public health funding allowing free access to health services. At the operational level, the PHC strategy has generated organisational changes in healthcare services. It employs a multisectoral approach that connects health to other sectors, such as agriculture, animal husbandry, education, etc. In addition, it values curative therapies, and actions that promote prevention and health. For the State's involvement to be effective, local communities must be involved, especially in the decision-making process. However, this momentum petered out in developing countries that were burdened by foreign debt following the financial crisis of the 1980s. These countries were obliged to drastically reduce the funding of their healthcare systems and structurally adjust their programmes mandated by the World Monetary Fund, thus resulting in disastrous consequences in healthcare delivery. In addition to this significant decrease in State financial support, which largely contributed to the setback of PHC policy, several authors blame two other factors: the lack of operational strategies for implementing PHC programmes, and the fact that their social and political ramifications have been largely underestimated[26]. We noted that most communities played a passive role, in so far that village committees were set up merely to serve the interests of local elites.

The emphasis of the Bamako Initiative (BI) in the 1990s was on "cost recovery", a mechanism involving community participation and the funding of health institutions, with the State's role implicitly reduced. The goal of this initiative was to revitalize PHC policies. Technically, the BI called for subsidies from the States and their partners to support community-based health systems, and to build an initial supply of essential generic drugs that would be replenished from user contributions. In addition to contributing to health financing, communities were to co-manage the funds with management committees that were to sell essential generic drugs to users with a profit margin. Sales profits and healthcare contributions from users would make it possible to buy back the initial stock of drugs, assure better access to healthcare, and improve the quality of services. This mechanism of direct payments by users has called the welfare state into question and puts the onus on the people for solving their own health problems.

According to BI evaluation reports, even though the BI has given greater value to community participation in the functioning of health systems, the access to PHC for the poorest segments of the population has been compromised[27]. The exemption policies were essentially ineffective due to difficulties in identifying beneficiaries and the lack of real funding.[28] [29]

Finally, specifically targeted healthcare policies that provided for free services were introduced in the early 2000s primarily to resolve the issue of poor access to healthcare services that was due to financial issues. These policies were based on the following: (a) the context of growing poverty and the inability of households to meet health expenses, therefore jeopardizing their access to public health services; (b) the failure of the BI to reduce the inequitable access to healthcare and improve health coverage

[24] World Health Organization (WHO). Primary healthcare: report of the International Conference on Primary Health Care.
[25]Stéphane TIZIO. Trajectoires socio-économiques de la régulation des systèmes de santé dans les pays en développement : une problématique institutionnelle.
[26]Pierre FOURNIER, Slim HADDAD, Pascale MANTOURA. Réformes des systèmes de santé dans les pays en développement : l'irrésistible emprise des agences internationales et les dangers de la pensée unique.
[27]Valéry RIDDE. *L'accès aux soins de santé en Afrique de l'Ouest - Au-delà des idéologies et des idées reçues*.
[28]Valéry RIDDE, Jean-Pierre JACOB dir. *Les indigents et les politiques de santé en Afrique, Expériences et enjeux conceptuels*.
[29] Hara HANSON, Eve WORRALL, Virginia WISEMAN. Targeting services towards the poor: A review of targeting mechanisms and their effectiveness

(differences between the haves and the have nots, between rural and urban areas); (c) the difficulty of reaching the MDG despite efforts made.

In the early 2000s, provisions providing for payment exemptions (partial or full) were set up at various service centres for the benefit of certain vulnerable groups (particularly children under the age of five and pregnant women). The high rates of maternal and infant mortality were compelling arguments in favour of designating children and women of childbearing age as beneficiaries of programmes that were created to reduce or eliminate financial obstacles. The key services in question concerned prenatal consultations (PNC), childbirth services, family planning (FP), vaccines, and the treatment of paediatric diseases.

However, the measures providing for free or subsidized healthcare were implemented hastily or too hastily, thus exposing their shortcomings. While they did manage to decrease or even remove the financial obstacles for many of the designated beneficiaries, resulting in their massive recourse to health services, this spike progressively diminished over the years. This decrease was caused by the accumulation of numerous functional flaws. The hurried set-up of the programme, the insufficient preparation of health facilities, delays in State reimbursements, and the shortage of drugs were the primary bottlenecks that we uncovered through our research[30]. Furthermore, we observed the low level of commitment among front-line operatives, those on the "inside", which we attributed to them having been excluded from the programme's conceptualisation and implementation.

Nevertheless, despite these setbacks, the principle of development "from the ground up" has become more ingrained in international public policies. As such, "Leave no one behind", a tagline associated to one of the guiding principles of Sustainable Development Goals (SDG) in the development of strategies set for 2030, clearly expresses the international community's determination to combat exclusion and discrimination.

For such a principle to be operative, the effective and free participation of all individuals or groups of individuals at all levels is required. A tangible example of this in the field is the widely applied use of the participatory approach expressed in words such as "stakeholder involvement" and "co-production of interventions". From now on, no research activity, no development project can be conceived without stakeholder commitment, from design to evaluation, which includes the identification of appropriate tools, the planning, and the implementation process (we also speak of "participatory evaluation"). Benefactors have even imposed the participatory approach as one of their conditions. However, the very concept of "stakeholders"[31], and how it is applied are both problematic. Several authors from various disciplines point to the difficulty of identifying these stakeholders, as well as the ambiguity of individual memberships in groups, because individuals may belong to multiple groups. In addition, there are asymmetrical power plays, the clash of diverging interests, clientelism, various and sometimes contradicting interpretations of the project and/or its objectives, etc. [32,33,34,35,36]. If most of these studies focus on the various issues relative to the participation of "internal stakeholders", in the end, very few of them report on their real strategies. Stakeholders are often portrayed as a passive group that suffers more from the repercussions of projects than actively being involved in them.

Our research runs counter to this trend. We support the hypothesis that states that certain local personnel, specifically the field agents who produce endogenous solutions, are especially valuable, because when "*faced with daily constraints, they try to shake things up in order to bring about some realistic*

[30]Jean-Pierre OLIVIER DE SARDAN, Valéry RIDDE dir. Une politique publique de santé et ses contradictions

[31]The most common reference definition is that of Freeman quoted by Mercier (2001:3): "a stakeholder is an individual or group of individuals who can affect or be affected by the achievement of organizational objectives" (Freeman, 1984: 46).

[32]Samuel Mercier. Une analyse historique du concept des parties prenantes : quelles leçons pour l'avenir?

[33]Bovaird, 2005,

[34] Laurent VIEL, Gonzalo LIZARRALDE, Fella Amina MAHERZI, Isabelle THOMAS-MARET. L'influence des parties prenantes dans les grands projets urbains

[35] NAMAZZI Gertrude et al. Stakeholder analysis for a maternal and newborn health project in Eastern Uganda.

[36]Sudi NANGOLI et al. Stakeholder participation: An empirical investigation.

improvements, which may appear to be minor from a French Minister's perspective (and even less so when viewed from Geneva or Washington), but which are nonetheless an advancement for the benefit of a health service, a municipality, a dispensary, a college[37]". This hypothesis complements the thoughts that Jon Daane and his collaborators held regarding the peasants of Bas Benin who enjoyed some leeway regarding agricultural development programmes:

> *"Peasant men and women do not allow themselves to be passively carried away by these macro-structural processes. They themselves identify the opportunities and problems brought about by these processes, although their perceptions are not always the same as those of outsiders, and they react to these problems by drawing on their knowledge and capacities. They try to come up with their own answers and solutions and, as a result, (…), various strategies emerge which are not necessarily attributable to the outcome of some kind of inescapable structural logic."*[38]

Among the very few seminal studies which have taken an interest in this problem in the field of health in West Africa are those that have been carried out in the Côte d'Ivoire on the "minor arrangements" (or "inventions") that health workers apply to protocols for the prevention of mother-to-child HIV transmission.[39] Health practitioners In Burkina Faso manage to fiddle and improvise to come up with alternative solutions when confronted with the structural constraints of the health system[40]. However, few of these practitioners end up "choosing" the option of locally developed solutions among other possibilities.

Starting from the premise that the actions of local personnel have a significant influence on the implementation of health programmes, and that each person can choose different available options, we can refer to Albert Hirshman's analyses which find that those who are confronted with institutional constraints are given three possible choices: "exit", "voice", and "loyalty"[41]. These three options reflect the various rationalities at play in the commitment process of people who must deal with how an official body, or a programme functions. The first option, "exit", implies a disinterest in the project, or a rejection or a disagreement with its rationale, i.e., "we prefer resigning". The second, "voice", leads to clashing with the project in various ways through available communication channels or existing institutions. Finally, the third option, "loyalty", involves either passively or actively remaining with the project.

A fourth option is conceivable, one which allows for a broader examination of a health worker's latitude, and which is frequently encountered in the world of development, namely, circumvention. It occurs when the conditions for development projects are ill-suited or when certain injunctions are deemed unacceptable. Thus, local personnel might dissolve programmes, appropriate what suits them, and reject what they dislike or disagree with[42]. We can even consider a fifth option: finding locally based solutions. The five options should not be thought of in a linear or exclusive fashion, they can be combined, and thus can serve as a framework for a pragmatic analysis of the health worker's degree of involvement or appropriation. For example, "loyalty", which presumes complying with the rules, may have been, in fact, forced upon. Simulated loyalty may have to do with undisclosed intentions unrelated to the project that result in wanting to circumvent it. It is like seeing someone temporarily taking the floor but finally backing down. Seeking out locally based solutions can imply commitment, just as it can circumvention. We can widen the range of possible configurations if we apply variable factors, such as power/influence, hierarchy, gender, age, social or economic status, education, information. Alternatively, if we consider other factors like the interactions of people, their affiliations, their compromises, their tactics. This

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[37] Jean-Pierre OLIVIER DE SARDAN. *La revanche des contextes.* p.410

[38] Jon DAANE, Mark BREUSERS, Erik FREDERICKS. dir. *Dynamique paysanne sur le plateau Adja du Bénin*. p.10

[39] Isabelle GOBATTO, Françoise LAFAYE. Petits arrangements avec la contrainte. Les professionnels de santé face à la prévention de la transmission mère-enfant du VIH à Abidjan (Côte d'Ivoire).

[40] Isabelle GOBATTO. *Être médecin au Burkina Faso. Dissection sociologique d'une transplantation professionnelle*

[41] Albert HIRSCHMAN. *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*.

[42] Jean-Pierre OLIVIER DE SARDAN. Les enjeux scientifiques et citoyens d'une anthropologie des politiques publiques.

conceptual framework is therefore especially pertinent for comprehending how individuals and collective groups deliver "care and cure" services as viewed through the rationale of the personnel involved and the latitude they enjoy in defiance of political, economic, technical, and sociocultural norms.

This article is in three parts. We begin by outlining the socio-political context and current state of FSRH in Mali, Mauritania, and Niger. We then present the methodological framework of our study followed by the results of our research. We will conclude by describing the significance of ESs in project reform and their potential role in the education of health professionals.

Methodology

Our research forms part of the French Red Cross PROGRESS initiative (Regional Gender Health Programme of the Sahel) whose objective is to "contribute to the betterment of Maternal and Child Health, Sexual and Reproductive Health (SRH) and Family Planning (FP)". In-depth ethnographic surveys were carried out in Mali, Mauritania, and Niger using qualitative techniques. We then conducted individual and semi-structured collective interviews with various strategic groups[43] using an interview format[44]. We also took observations both in the community and health facilities and carried out our surveys in two stages: an exploratory collective survey in Mauritania and in-depth surveys in each of the three countries.

Collective survey: ECRIS

The first phase of our investigation adopted the collective research format of ECRIS (Rapid Collective Investigation for the Identification of Conflicts and Strategic Groups) for "*comparative socio-anthropological research at several sites, carried out as a work team, beginning with a 'rapid' gathering stage and followed by a traditional 'field' phase, which is still essential and necessitates relatively intensive and consequently relatively lengthy individual investigation*"[45]. Specifically, we had a dual objective: on the one hand, prior to conducting the in-depth surveys, to narrow down the focus of the research and the research methodology, and, on the other, to bolster the research capacities of researchers and field agents in the area of sexual health and reproduction in the countries of the South.

The first phase took place at the Wilaya du Gorgol PROGRESS intervention site in Mauritania from December 1 to 4, 2020. First, prior to conducting the actual investigation, the Mauritanian work team conducted a field survey. The aim was to discover potential study sites and identify local key groups and define the issues related to our research topic. As a subsequent step, we focused on the theoretical aspects of the research topic by bringing together members of research groups, health professionals, staff from non-profit associations, and humanitarian NGOs, like the French Cross in Mauritania. In addition to strengthening our collaborative work in this field of practice, we sought to gather the points of view of these participants as part of the data collection process for both ECRIS and the in-depth investigations that were to follow. The research topic and the methods to be used were presented and discussed to ensure that all the participants fully understood them. Field workers were given "make do" scenarios for discussion purposes, and caretakers were given scenarios that called for "tinkering" (either in a good or bad way) as a way to provide care when the regional health system would face shortages. The other main activity during the theoretical part of this phase was to collectively determine certain

[43]The notion of strategic group that will be developed by Thomas Bierschenk and Jean-Pierre Olivier de Sardan is "essentially empirical and methodological. It simply assumes that the members of a given community have neither the same interests nor the same representations, and that, depending on the "problems", their interests and their representations aggregate differently, but not just in any manner. » (Cf. Jean-Pierre OLIVIER DE SARDAN. *Anthropologie et développement*. p.180).

[44]We did not use grids or interview guidelines, but rather outlines, or a type of flexible memory aids, which each interviewer freely adapts to the context and dynamics of the interview.

[45]Olivier de Sardan, (2003: 20)

indicators. As a group exercise, it gave each participant the opportunity to identify the areas of research during the practical phase of ECRIS, during which each investigating group, in conjunction with a specific strategic group, was to study one site.

In-depth investigations

As this is a multi-site and multi-country study (carried out conjointly in Mali, Mauritania and Niger), the research coordinator, the Laboratory for Studies and Research on Social Dynamics and Local Development (LASDEL) based in Niger, drew up a survey outline specifying the standard methodological approach and the data gathering techniques to be used. These were adapted to the specific contexts of the three countries.

We chose the study sites according to criteria previously defined by researchers and validated in the field by French Red Cross personnel and health officials.

The general reference criteria were as follows:

1. reference centres were automatically included,

2.based on RMNCAH-related indicators, we combined health services performing well with those that were performing moderately well or poorly, and

3. we combined sites strongly attractive for businesses and agricultural producers with those situated in isolated or underdeveloped environments (in peripheral or rural areas).

Each research team adapted these general criteria by taking into account the specific characteristics of the three countries. The locations chosen in each country are shown in the following table along with the factors that influenced their selection.

Table 1: Sites and selection criteria

Country	Municipality/ Moughataa/ department	Urban environment/ criteria	Rural area / criteria	Site totals
Mali/HD of Bamako	Municipality 1	- ASACOKOSA - ASACODJE		2
	Municipality V	- ASACODA - ASACOTOQUA - ASACOGA		3
Mauritania/ Wilaya of Gorgol	Kaedi	- Kaedi Hospital - HC Djeol	- HU Touldé	3
	Maghama	- HC Maghama	- HU Bougguel	2
	Mabout	- HC Mbout	- HU Foum Gleita	2
	Mouguel	- HC Mougel	- HU Oudeeychrak	2
Niger/HD of Tanout	Municipality of Tanout	- DH: DMT and maternity ward - Urban IHC	- Shirwa	3
	Municipality of Gangara		- Yagagi	1
	Municipality of Olléléwa		- Baboulwa / isolated facility	1
Total sites		12	7	19

We conducted our research at the selected health centres and in the surrounding communities to gather relevant data on the access and use of FSRF services, and on the practices and organization of healthcare.

The strategic groups we met were as follows:

- ***Institutional bodies***: prefectures, regional health centres, municipalities, civil status services;
- ***Community participants***: mothers/women, men, boys and girls, management committees, community and religious leaders, non-profit associations and groups of women and/or men, carriers;
- ***Health providers:*** those within the community (community networks, midwives, healers, herbalists, marabouts), health personnel (physicians, midwives, nurses, matrons), private health facilities, chemists.

The participants in the individual interviews and focus groups ranged in age from 18 to 60. A total of 139 interviews with individuals and focus groups were carried out.

All gathered information was examined thematically beginning with document review and a triangulation between the notes from the interviews, on the one hand, and our observations on the other. In addition, we documented the most significant case studies, while bearing in mind the impact of gender and generational norms. We documented ESs based on our observations and individual and group interviews. We then proceeded to study each person's verbal comments.

Results

Context: public policies and situations of female sexual and reproductive health in Mali, Mauritania, and Niger

The French Red Cross works with the countries of Mali, Mauritania, and Niger with the goal of enhancing the quality, access to, and utilisation of healthcare services. One of its support strategies is the planning of interventions to improve Maternal and Child Health, Sexual and Reproductive Health, Family Planning (MCH-PHC-FP) through the Regional Gender and Health Programme in the Sahel (PROGRESS). It is important to draw attention to several crucial contextual factors that support the French Red Cross's engagement in these three countries.

The three countries in question are among 16 others in West Africa with a high rate of poverty. According to estimates for 2013, 43 % of the population lives below the international poverty line of US$1.90 per day, with rural areas seeing the highest rates of poverty[46]. In 2014, a rate of 44.5 % was reported in Niger, 31.0 % in Mauritania, and 41.1 % in 2009 in Mali[47]. These three countries also have in common the fact that they lie the Sahel region where we see a strong concentration of State programmes, proposals, and legal and regulatory systems. Added to these are the innumerable programmes and interventions of international organisations and international NGOs.

In response to the unsuccessful implementation of many programmes, other policies and other interventions generally replace the prior ones, but (despite the best of intentions) without adequately considering the lessons learned from past interventions nor any possible synergies. However, this raises a fundamental query. Is this plethora of institutional measures, which seem to pile up in a never-ending heap of sedimentation,[48] any guarantee of effectiveness? Or does it, on the contrary, mask the incapacity

[46] African Development Bank, 2018, perspectives économiques en Afrique de l'Ouest 2018, Perspectives_economiques_en_Afrique_2018_Afrique_de_l_Ouest.pdf (afdb.org)

[47] Beegle KATHLEEN, Luc CHRISTIAENSEN, Andrew DABALEN, and Isis Gaddis. Poverty in a Rising Africa.

[48] Thomas BIERSCHENK. Sedimentation, fragmentation and normative double-binds in (West) African Public Services.

to meaningfully change the real health situation? According to socio-anthropological studies, the issues that health facilities must deal with on the ground have been put on the back burner.

This situation reflects the multidimensional problems related to health, geopolitics, security, economics, and demographics as they relate to FSRH, and, more broadly, to the general delivery of healthcare services in the South. These problems are essentially at the root of the dire healthcare situation of this segment of the population. It has paid a very heavy price for the problems connected to Maternal and Child Health, Sexual and Reproductive Health, and Family Planning (MCH-SRH-FP).

Unquestionably, maternal and child health in Mali has improved significantly in recent years. Prenatal care by a qualified healthcare provider increased from 57 % to 80 % between 2001 and 2018[49]. Throughout the same period, the proportion of women who had at least four pre-natal consultations rose from 30 % to 43 %. The proportion of births that occurred in a medical facility also increased from 38 % in 2001 to 67 % in 2018. However, pregnancy and childbirth are still risk factors for many women and newborns despite these advancements. The chance of maternal death throughout a woman's reproductive years is one in fifty, which has led to the high maternal mortality rate of 368 per 100,000 live births. Many of these maternal deaths, which are frequently brought on by haemorrhages and anaemia attributable to hypertension and infections, could be avoided if complications were effectively addressed by a well-functioning healthcare system. Neonatal mortality rates are high (35 ‰), as well as infant and child mortality rates (58 ‰ and 98 % respectively[50]. Contraception use is low, as 17 % of married women between the ages of 15 and 49 practice some form of FP, while 16 % use a modern contraceptive technique.

Mauritania and Niger present the same situation, despite some progress achieved in the area of maternal, child, and adolescent health. Mauritania records 626 maternal deaths per 100,000 live births, and an infant mortality rate of 77 per 1,000 live births. Regarding FP, modern contraceptive prevalence is low: 15.6 % among married women, according to the 2016 MICS survey[51]. In 2012, Niger recorded a maternal mortality rate of 535 deaths per 100,000 live births. The infant and child mortality rate fell from 318 ‰ in 1992 to 126 ‰ in 2015, compared to the national objective of 106 ‰ that year. As for infant mortality, the rate fell from 123 ‰ in 1992 to 51 ‰ in 2015, compared to the national objective of 41 ‰. Over the same year, the contraceptive prevalence rate among married women using modern methods was estimated at only 12.2 % [52].

Like the other countries of the Sahel, Mauritania and Niger have adopted various policies and legal provisions to improve the health of mothers, children, and adolescents. They are summarized in the following table.

[49]AMBF, 2016-2019 Plan stratégique 2016-2019 de l'association malienne pour le bien-être familial, Bamako, Mali.
[50]ANBF. 2016-2019 Plan stratégique 2016-2019 de l'association nigérienne pour le bien-être familial, Niamey, Niger..
[51]Stratégie innovante pour accroitre l'adhésion à la planification familiale en Mauritanie.
[52]Enquêtes démographiques et de santé et à indicateurs multiples du Niger, EDSN-MICS-IV 2012

Strategy	Mali	Mauritania	Niger
Political strategies	- National population policy, one of the objectives of which is to increase the prevalence of modern contraceptive methods from 8.2% in 2001 to 30% by 2025, - Strategic plan for growth and reduction of poverty 2012-2017, with increased FP efforts in high fertility areas with the view of expanding the number of school-age children, - Reproductive health strategic plan between 2014-2018 - Ten-year health and social development plan between 2014-2023, with the promotion of family planning to reduce maternal and neonatal mortality through a 20% increase in the use of contraceptives by 2023. - Policy of cost-free caesareans since 2005 and malaria treatment since 2007	- Strategic Plan for Securing Products in Reproductive Health for the period 2010-2015, - National plan for repositioning FP as a priority action of the PNDS between 2012-2020, - National Health Development Plan (PNDS) drawn up for the period 2017-2020, - Strategic Plan for Securing Reproductive Health Products between 2010-2015, - Budgeted National Plan for the spacing of births 2019-2023. - Subsidy policy for maternal and neonatal health services through the "*Forfait obstetrical*" – the "Obstetrics package" available since 1998	- National Strategy for the Prevention of Adolescent Pregnancy between 2015-2020, - National Reproductive Health Program between 2005 – 2009, - 2006-2015 Roadmap for the reduction of maternal and neonatal mortality; - Health Development Plan between 2017-2021, control of population growth through the promotion of FP and SM, - Budgeted national action plan for family planning between 2013-2020, - Scaling up of Essential Family Practices with the support of UNICEF. - National FP repositioning plan 2013 – 2020, - Plan for scaling up task shifting in family planning (2020-2022). - Policies for cost-free services to pregnant women and children under 0-5 years of age and the treatment of gynaecological cancers since 2006
Legal provisions	Law No. 02-044 of June 24, 2002, relative to reproductive health	Law n° 2017-025 of November 15, 2017, relative to reproductive health.	Law n°2006-16/ of June 21, 2006, relative to reproductive health

Sources: government publications of Mali, Mauritania, and Niger.

Although the above table does not display the full range of policies implemented over the previous 20 years, it shows that the three countries have followed a very similar pattern (e.g., "traveling models"[53]). However, it should be noted that Mauritania differs from the other two countries with its 1998 plan known as the "Obstetrical package" ("*Forfait obstetrical*"). Its aim has been to lower the financial barriers that hinder access to SRH services. Prior to this, comparable programmes had been created in Mali and Niger beginning in 2005. The implementation of the Obstetrical Package in Mauritania relies on outside financial and technical support from the French Development Agency, as is the case with most health programmes. The same situation has occurred in Mali and Niger, as well as in most low-income countries that rely heavily on foreign public aid, the consequences of which have been reported to be damaging. It should be emphasized that Mali (in 2002) and Niger (in 2007) took a relative lead in the official recognition of health and reproductive rights. Mauritania has recognized these right only since 2017.

[53]Jean-Pierre OLIVIER DE SARDAN, Aïssa DIARRA, Mahaman MOHA. Traveling models and the challenge of pragmatic contexts and practical norms: the case of maternal health.

Even with legal protection, access to FSRH services (contraception, medically assisted abortions, child delivery, assisted reproduction, care, PMTCT) remains problematic. Technical and organizational dysfunctions of the health systems make it difficult to enforce the provisions of the laws that run counter to certain socio-cultural gender and generational norms and that discourage women from using FSRH services.

These structural constraints at the various levels of the health system result in having healthcare workers develop a capacity for improvising alternative approaches, or ESs, whenever they provide palliative care[54]. We will present a set of ESs that they use either individually or collectively when the delivery of curative and preventive care is limited or blocked.

The discrepancies between the design of programmes and their actual implementation do not really differ from one country to the next, as do the failings in the organisation of care and the management of human, financial, material, and logistical resources. Health, migration, security, and economic emergencies must also be taken into account. These are crises that weaken health systems already struggling with insufficient funding, staffing, and resources. Sexual and reproductive health have been impacted by the Covid 19 and Ebola pandemics, as well as other recurring epidemics (meningitis, measles, cholera). The same is true for population migration, which weakens women's living circumstances. Finally, the insecurity caused by armed conflicts disrupts basic public services. This situation, made up of multi-dimensional structural constraints at several levels of the health system, is very conducive to having health personnel develop their capacity to create alternate strategies, i.e., ESs.

We will present below a set of ESs used by health operatives in the field, either individually or collectively, when they are constrained or blocked in the delivery of curative and preventive healthcare. These ESs deal with issues related to 1) medical evacuations; 2) the availability of light equipment and essential drugs; 3) gender norms related to the access to FSRH services; 4) anonymous users; 5) training of health workers.

1. The medical evacuation referral system

> "*That's our big problem when we want to refer a woman to another health facility, it's a big problem, the woman has to go back to one that's in the vicinity. And there, the health centre calls for an ambulance. Imagine a woman who waited before deciding, then she comes here, and now we're going to tell her to take a cart and go to another health centre and that's where they're going to call an ambulance…*" (male healthcare worker, Tanout health district).

Women complain about the cost of medical evacuations even when they are not always aware of the exact amount the household should pay, since the husbands generally handle the finances. In rural areas, it should be noted that evacuations can take several routes as they pass through a region. The evacuation starts from the home (usually by cart or a public transport vehicle) and ends at the regional referral maternity ward, after possibly having passed through an outlying health centre and a district hospital.

> "*In an evacuation, it's the Gangara ambulance that evacuates us. It costs 30,000 CFA to go from Yagaji to Tanout, and 35 to 45,000 F from Yagaji to Zinder."* (A member of the management committee of an IHC (integrated health centre), Tanout health district, Niger)

At the referral centres along the journey, households must pay for transportation, prescriptions, the blood bag in the event of transfusion, hospitalization ("the bed"), and food for expectant mothers and

[54]Cf. contemporary works on the theories of "make do" in the analysis of the capacities of people to adapt to the constraints, pressures, and deficiencies in the management field (Anass MAWADIA, Ariel EGGRICKX, Philippe CHAPELLIER. La créativité organisationnelle : un apport pour le bricolage collectif. COMTET Isabelle. Entre usage professionnel des TIC et structure organisationnelle : la capacité au bricolage comme compétence adaptative).

accompanying family members. The care for the group of family members, which can include more women than men, may be costly, especially since there is an average of three family members present at the end of the patient's hospitalization, and many more in peripheral health centres.

At the same time, the shortage of the State's operational subsidies, which include fuel allowances, has long been a source of complaints. According to a caregiver, "E*veryone knows it, even everyday people, that the State no longer subsidises fuel for evacuations*". As a result, users bear most of the cost of evacuations. Additionally, in some emergency situations, the referral system—whether it be within a health department or outside between a peripheral health centre and a referral centre—is not always operational, and for this reason health professionals do not always comply.

1.1. Adopting the "additional *centimes*" scheme

To cope with this funding issue, the "additional *centimes*" scheme was adopted to make up for the State's failure in financing medical evacuations in some regions of Niger. This regional initiative is a pooling system that enables cost-free evacuations for all users of healthcare services. It entails deducting 100 CFA francs from patients for services provided at each phase of their health condition. The payment is made at the time of the initial consultation but not for any subsequent visits for the same condition.

This initiative is in line with the referral system. The "health huts", which are at the base of the healthcare pyramidal structure, retain a part of the *centimes* collected to finance medical evacuations between the "health huts" and the IHCs (integrated health centres) to which they are attached. The remaining *centimes* are given to the IHCs to finance evacuations between IHCs and district hospitals (DHs).

The procedure is the same at the IHC level. Each IHC retains a portion of the evacuation fund that is made up of the monies it collected itself and from its "health huts". The remaining portion is sent to the DH for future evacuations to the town of Zinder. Evacuation funds at the DH include the *centimes* that it has collected itself and those received from the IHCs. These funds are used to pay for the fuel for ambulances in the district. To check this, the members of the management committee inquire about the funding situation during head district meetings attended by the district management team (DMT). The IHC leaders hold the evacuation funds and the relevant documents, which are mainly records of consultations and the "*centimes*" accounts. The heads of the management committee can run verifications. The principle behind these control procedures is as follows: there must be as many medical consultation vouchers as there are *centimes* tickets plus their corresponding sum. Payments and checks must be made monthly.

This scheme has barely taken off in the Tanout health district, but in other districts that we looked at, such as Keita, the system was successful in resolving the issue of medical evacuations, even though it was somewhat counter to the free healthcare policy, because public authorities perceived the *centimes* scheme to contradict the principle of free healthcare.

1.2. Bypassing the rules for referrals

Strict compliance with established protocol is circumvented by health providers who must cope with certain emergency situations.

> "*Sometimes we have to circumvent a protocol in order to help women who are in labour. For example, we say that the lady who has not had an PNC has to be transferred to another unit. The same goes for a lady whose height is not over 1 m 50. Normally we do not even have to do their PNC here. But frequently there are ladies who stay at home, they haven't had a PNC, they come in already fully dilated. They require attention. There are others who, as soon as we tell*

them that we're going to transfer them elsewhere, go back home and stay there until labour begins. So, once labour is well along, they come back and find out that the midwife who ordered the transfer has already left. You're there and a transfer is no longer possible. You see that delivery is already in progress. So, you have to take charge. There are just things that you got to do. (health provider, female, municipality V, Bamako, Mali).

2. Light equipment, essential drugs and medical equipment

> *"I need some equipment, consumables. For example, we now don't have enough gloves. The gloves we use all the time for examinations. We use more than one pack a day. For instance, this month, I ordered 30 packets, they brought me five. Each time, you have to go back and get some more. There aren't enough compresses, even drugs are in short supply. Now, if I remember, yesterday I used six vials of ampicillin, and I had ordered 200, but they gave me 35. So, every time you have to go back, go back again, it's a problem. But when the monthly order is fully delivered, it really can promote good working conditions.* (caregiver, female, Tanout health district)

The health facilities in the three countries, particularly in the rural areas of Niger and Mauritania, are experiencing problems with equipment and infrastructure that make it difficult to provide various FSRH services properly. Health personnel often work in unsanitary conditions due to the dilapidated state of the premises and a shortage of surface cleaning products. Supplies are inadequate. For example, there are few or sometimes no birth delivery kits, and sterile gloves are very hard to find. Drugs frequently run out and generally concern iron, Syntocinon, vitamin K1, Argyrol, and so on. Sometimes, the guidelines for prescribing only INN (International Non-proprietary Name) drugs cause compliance problems for patients as a result of the administration of multiple doses, or because of their inconvenient, sometimes even intolerable, side effects. These constraints, imposed by "the lack of everything", oblige caregivers to adapt and come up with improvised solutions.

2.1. Making up for the lack of supplies

> *"In the absence of metal or plastic urinary catheters, we use serum tubing. We cut it up for use as a catheter for emptying the bladder. If we don't have an ice pack, we use a cold accumulator, or a plastic bag filled with cold water or chunks of ice that we place on the pregnant woman's stomach. We have an insufficient supply of scissors, so we sterilize the ones we have by flaming them with alcohol and reuse them when needed again quickly. Alcohol sterilization can take time.* (caregiver, male, municipality V, Bamako, Mali)

2.2. Adjusting drug prescriptions

Care providers may veer away from conventional patient management protocols so that they can offer care that they believe is more appropriate for the patients. They decide this based on their extensive experience treating certain conditions, especially sexually transmitted infections and infertility.

> *"We ourselves occasionally administer treatment based on our own experience. Generally, they tell us to use INNs, such as nystatin and metronidazole ovules. But on the market, we find some combinations of antifungals, anti-parasitics, and anti-bacterials. All these can be combined in one medication instead of two. Even taking two drugs, one in the morning and the other in the evening, is not that easy. Some women can be lax about that. So, if they can find two drugs combined in one product that only needs to be taken at night to be effective, so much the better. […] You'll find that most women are unable to take iron plus folic acid prescribed to them. These products make them vomit and make them lightheaded. But there is another type of iron supplement on the market that they can take without any problem. The iron I typically use is iron*

plus folic acid combined with vitamin C. This is the iron I prescribe to my patients, and they haven't expressed any complaints. Also, I get good results. (caregiver, female, municipality V, Bamako, Mali)

2.3. Alleviating the shortage of treatment rooms and the non-availability of some equipment

Given an ill-adapted infrastructure, several services must be performed in a single room at the health centre.

"*When you go to the single-room maternity ward, all the pre-and post-natal consultations, cervical cancer screening, PMTCT, and counselling are done in the same room.*" (caregiver, female, municipality 1, Bamako, Mali)

It is sometimes possible to informally rent equipment when its lacking.

"*There were times when we didn't even have an ultrasound machine. We used the one that belonged of an individual who would come here for some time. If people found out at that time that we didn't have an ultrasound machine, they wouldn't come in anymore, because they would have to pay, and that is understandable.* (caregiver, male, municipality V, Bamako, Mali)

3. Gender norms and access to FSRH

"*If each time you seek what is good for your wife, you lose the power you have.* (men's focus group, Tanout health district)

"*You take the risk of losing your place as head of the family"* (men's focus group, Tanout health district)

"*When a woman acquires her financial independence, the man becomes the victim, he no longer has the power to decide*" (men's focus group, Tanout health district)

The society in Mali, as in Mauritania and Niger, remains predominantly patriarchal, drawing its roots from multiple social and traditional precepts that assign differentiated roles and responsibilities to men and to women, to the elderly, and to the young. Men are responsible for most household expenses, such as those for accommodation, clothing, food, health, education of children, organising of and participating in religious ceremonies, baptisms, marriages. They can pay for these expenses from income they receive from various sources: agriculture, livestock, handicrafts, construction work, administrative tasks, trade, transportation, etc. By taking on this financial responsibility, they provide for the basic needs of family members. The greater they have the capacity to provide for the needs of their wives and children, the greater they gain in social prestige and consolidation of their power within the household. This power reinforces their responsibility and the latitude they have in order to make decisions during significant life events, such as marriages, illnesses, as well as less significant ones, such as trips away from home.

Generally, women are entrusted to domestic chores: meal preparation, laundry (except in rural Hausa society where men wash their own laundry), maintenance and care of children, the elderly, and the sick, maintaining hygiene in the home, etc. The economic power of women and their reliance on healthcare services are intertwined: a woman without a personal source of income will use health facilities for herself and her children to a lesser degree.

However, the lack of women's economic power alone does not explain their low utilization of health services. The level of financial autonomy that some women manage to attain thanks to their determination and/or the numerous "income-generating activities" (IGA) programmes set up by public authorities and their partners, particularly in rural areas, is not always an indicator of better access to

healthcare. For example, the profits from IGAs may allow women to contribute financially to their health expenses and that of their children, but their financial autonomy may be reduced by the patriarchal system and social seniority that rule the healthcare decisions. Under these conditions, the financial independence of women is not always equated with their ability to make their own independent healthcare decisions [55,56,57]. Family planning (FP) is typically used by married women to space births, and more so by those who have had short intervals between pregnancies. The following groups of women are not eligible for FP services: 1) adolescent girls for whom premarital sex is socially taboo (even though FP for them is in high demand); 2) divorced, widowed, repudiated women, and women whose spouses are absent, since sexual activity is not permitted in those circumstances; 3) women who space their pregnancies naturally.

3.1. Encouraging women to use health services

To promote the gender approach during consultations, some staff encourage men to accompany their wives when their children are vaccinated.

> "*The midwife had even suggested, at one point, that the men who accompanied their wives for vaccinations should not have to wait in line. It was a way to encourage them to come and attend the discussions on the pre-and post-natal consultations that we carry out when they come for vaccinations.* (caregiver, male, municipality V, Bamako, Mali)

3.2. Lowing the barriers that prevent young people from using FSRH services

The staff of an IHC of the Tanout health district have come up with an original plan to encourage adolescent girls to use FSRF services. The SRHAY-trained manager is in charge of distributing contraceptives to young people. Two IHC health officers maintain a good rapport with them and facilitate their contacts with the manager. Otherwise, another SRHAY-trained health officer is available. The IHC also has the job of raising awareness among junior-high and high school students and encourages them to use available services.

> "*To get in touch with the IHC manager, many teenagers ask the administrator who is known by everyone in Tanout, or an IHC employee. In general, teenagers come for advice, and adolescent girls pregnant out of wedlock frequently seek assistance.* (caregiver, male, Tanout health district)

> "*We have given some responsibility to one of our health officers. They have her name as a contact and even if they're at home they can go to her to get advice on FP or on their sexuality because she's been trained in SRHAY. They are free to call her at any time. We think there will be a special room reserved for that in our new facility.* (caregiver, male, Tanout health district)

4. Anonymous users

> " *For my PNCs, I had no problem because I brought my own midwife along and she handled my follow-up* " (focus group, mother with children, municipality V, Bamako, Mali).

[55]Hélène Ryckmans. L'impact des projets de développement sur les rôles de production et de reproduction des femmes africaines

[56]Alain MARIE et al dir. L'Afrique des individus. Itinéraires citadins dans l'Afrique contemporaine.

[57]Hadiza MOUSSA. *Entre absence et refus d'enfant. Socio-anthropologie de la gestion de la fécondité féminine à Niamey, Niger.*

"*For pre- and post-natal consultations, the health officers see only few women compared to the number who have been waiting since dawn. Some women return home without having had a consultation*. (focus group, women, Tanout health district, Niger)

Some women believe that the waiting time for an PNC, and even for care at the time of delivery, takes too long. They are obliged to wait a long time in the maternity ward before being examined by health staff, especially if they are there for an PNC. Women from the surrounding villages in rural areas get up early to walk to the health centre (for two hours in some cases). Despite this, they still do not always receive a consultation. Added to this are the disparaging remarks made by service providers:

"*Whoever is in a rush can leave. We don't force anyone to come here.* (Comment by a staff member in a community health centre in Bamako, Mali)

The general recommendation for women when FSRF services are hard to obtain is to develop personal relationships with health workers. A pregnant woman can thus receive preferential attention, and, in addition, is protected against any carelessness by care providers on the day of the appointment. As a result, it is critical for a pregnant woman to have her own midwife. Anonymous users (drop-ins), most often from rural areas (usually village women without any financial or social means who live far from health centres) are at a high risk of being mistreated or are given a consultation by the health staff very late in the day.

4.1. Greater equity in accessing health services

Caregivers typically allow women who are considered "relatives, friends, or acquaintances", as well as those who have built a sponsoring relationship with them to move up through the waiting line for an PNC. These women have the privilege of getting a consultation as soon they arrive as a matter of priority. To help anonymous users better receive FSRF services, an IHC in Niger has set up a specific PNC day aside for privileged users. Anonymous users receive consultations on alternate days to avoid having them wait long hours.

4.2. Encourage commitment from the men

To promote the gender approach during consultations, staff have encouraged men to accompany their wives when their children are vaccinated.

"*The midwife had even suggested, at one point, that the men who accompanied their wives for vaccinations should not have to wait in line. It was a way to encourage them to come and attend the discussions on the pre-and post-natal consultations that we carry out when they come in for vaccinations.* (*caregiver, female, municipality V, Bamako, Mali*)

5. Supervisions

"*During the supervisions, we don't really get any training, yet they still talk about supervisory training! And not everyone receives professional continuing education. One of our weak points is training in the procedures of labour dystocia. As you are aware, our training is a rather limited, there are cases that go beyond our competencies and if we eventually get trained on labour dystocia, we'll be able to handle these deliveries right here at the centre*. (caregiver, male, DH, from Tanout, Niger)

Although it is recognised that supervisions play an important role in regulating health services and contribute to improved healthcare, we note however that they do not generate desired results due to huge implementation problems.

In Mauritania, the irregularity of supervisory visits is notable, as is the fact that the infrequent supervisory visits at reproductive health (RH) centres are typically confined to simply verifying cost recovery receipts. The lack of any regular feedback to supervised health officers makes it impossible to meet the objectives of proper staff training and management. Supervisory visits tend to be more bureaucratic than constructive and are often carried out in a rush. Moreover, there is no comprehensive follow-up on recommendations, and therefore the same remarks about the same health centres are written up each year without anything really changing.

5.1. Training and coaching nurses and midwives for the management of reproductive and sexual health

The Tanout DH maternity ward participates in the management of health workers through a DMT, as well as NGO programmes. A maternity manager is involved. She is assigned the job of being the RH/PMTCT contact point. In addition to teaching supervision, she coaches health officers. It should be noted that outside the DMT, she has established relationships of trust with NGOs, such as, "Les enfants de l'Aïr," which provide her with technical and financial assistance. Coaching is carried out quarterly over a three-day-period for each structure and covers technical and administrative duties, such as the use of management tools.

> *"I teach in three IHCs. I give them a course on illnesses every three months. The mentoring started in 2017 after we discontinued the 21-day training session on emergency neonatal care and obstetrics, so we went to the IHCs to train them in manual intra-uterine aspiration, ventouse suction, repair of the perinium, PMTCT, management of third-trimester bleeding, management of postpartum haemorrhaging, use of management tools. It's like on-the-job training. In each IHC, I work for three days.* (maternity ward manager of the DH, Tanout health district, Niger)

This learning format, highly appreciated by health workers, lies midway between formal protocols and first-hand experiences adapted to the context.

5.2. Strengthen the knowledge and practices of health workers in the management of certain pathologies

In Niger, a nurse who has worked for several years in the same IHC, first as aa health worker, then head of the centre, has acquired considerable management experience. She required the staff to attend daily meetings for them to be updated on various pathologies. A topic is given to a health worker who is assigned to do research and present the topic to other staff members. These sessions allow the health personnel to refresh their knowledge of the pathologies taught to them during their initial training. Topics often address epidemic diseases, and sometimes include the field of gynaecology and obstetrics.

> "*The health personnel quickly forget, if they are not reminded (of the concepts learned), and that is why we assign one illness to a health worker every day. Among the topics covered, there is also the functioning of the department. The health workers are satisfied because it suits them, for others they haven't looked at their notebooks since they left school. Everyone is in the same boat and must not forget what they learned."* (caregiver, female, Tanout health district, Niger)

A model for including ESs

As we have seen, the shortage of resources and the insufficiency of health programmes promote the creation of ESs, and, in some ways, legitimize them since, despite everything else, the delivery of services and the continuity of healthcare must nevertheless be ensured.

We have also seen that other solutions can be found when we compare public health recommendations with socio-cultural gender norms. But there are no ESs without underlying negotiations, without firm resolution, without people who, despite everything, are motivated by the responsibility of a job well done, refuse to fall into fatality, freely reflect on potential solutions, and, through experimentation, improvise a solution or combine things to finally come up with one. There are no ESs without relying on experiential practices, either individually or collectively, or without a solid understanding of the context. There are no ESs without the leadership that encourages and fosters creative dynamics, adopts flexible governance, and aids in the legitimation process. Furthermore, it can be noted that ESs develop at a relatively lower cost, and, in some circumstance, no monetary input is required.

Some endogenous solutions are micro-adjustments. They generally relate to materials (managing an ongoing equipment shortfall), and medication (managing shortages and drug prescriptions). Other solutions deal with large-scale adjustments, which lead to the formation of multi-affiliated and multi-level groups centred around the ESs. Thus, the people involved are no longer just those in the health service department but also higher-ranking in-house employees, or, more broadly, local government officials, community representatives, and members of trade unions of other professions (as in the case of the setup and operation of the "additional *centimes"* scheme).

These various characteristics of ESs, which are certainly not exhaustive, can offer a provisional typology according to the domain of governance to which they belong. The table below provides a summary of the previously described ESs.

Table: Typology of endogenous solutions

Problems	Endogenous solutions	Governance Domain	Place of production	Purpose
The high cost of medical evacuations for households	The setup of a pooling system against risks	Health financing	Health district	Ensuring the continuum of care
Lack of materials and equipment	- Use of medical tubing in the absence of a urinary catheter - Cold accumulator or a plastic bag filled with fresh water or pieces of ice in the absence of an ice pack - maintain user loyalty by renting a specialized device through private party	Material resource management	Health service	Ensuring the continuum of care
Difficulties in accessing services for anonymous users	- A PNC day set aside for privileged users - Encourage men to accompany their wives at health facilities	Organisation of care	Health Service	Improve equitable access to health services
Difficulties for adolescent girls to access FSRH	Health officials having an excellent rapport with young people are responsible for facilitating their access to RH services	Organization of care	Health Service	Improve equitable access to health services
Insufficient competence of health workers	Teaching of health workers by an experienced health worker, training is adapted to the contexts in which the profession is exercised	Human resource management	Health service Health district	Bolster the skills of health personnel

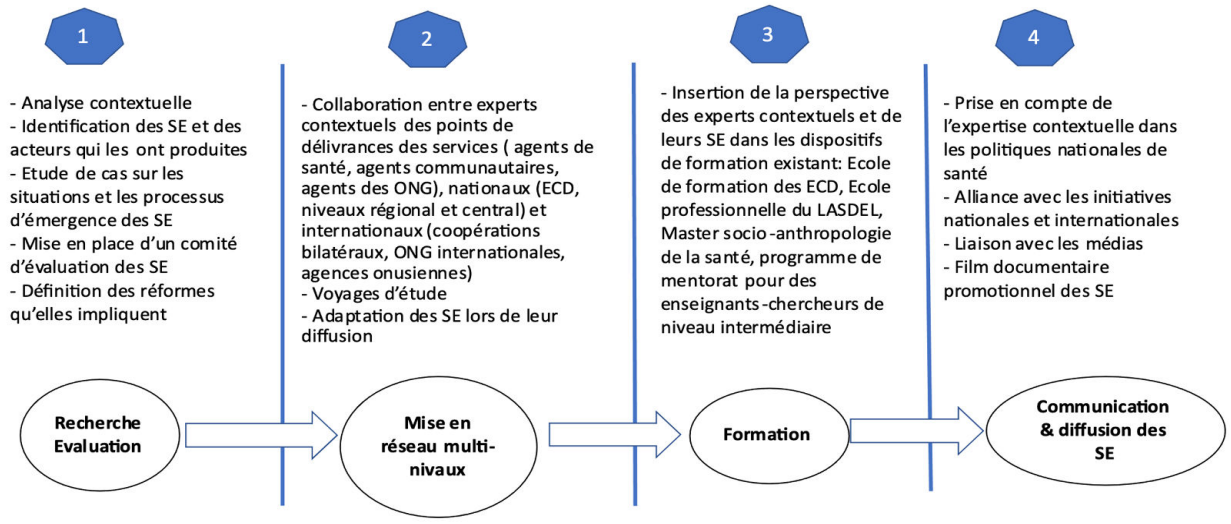
The day-to-day operations of health facilities therefore follows informal regulations in the provision of healthcare, human resources, and utilisation of equipment., ESs strongly contribute to better health system performance by making these function more effectively.

The use of ESs becomes "naturally" more widespread by three means: (a) through job assignments that move health workers from one health facility to another, from one district to another; (b) on the job, as caregiver trainees mimic their colleagues' behaviour as part of their socialisation process; (c) vertically, from the bottom up, i.e., higher-ranking employees promoting and institutionalising the practice of improvising ESs.

Institutional involvement is required in order to support the utilisation of ESs and considerably enhance the provision of healthcare. This entails being more aware of the role that ESs may play in significantly upgrading health systems, as well as the need to promote their more widespread use. Because not all ESs have value, and their use must be strictly regulated. Some are controversial because, even though they may be able to resolve a problem, they occasionally turn out to be damaging in the long run. This idea of positive vs negative ESs was the subject of extensive discussion among field agents during the ECRIS in Mauritania.

It is for this reason the model of including ESs in the development of strategies for improved healthcare services can be successful only if professional experts evaluate the ESs and retain only those that have actually proven themselves and truly contributed. to the quality of care.

Model for inclusion of endogenous solutions in strategies for improving the healthcare delivery



1. Contextual analysis Identification of the ESs and those who produce them Case studies of ES situations and how ESs are created An ES evaluation committee is set up Research Evaluation	2. Collaboration between contextual experts and health personnel, community officials, NGO officers, and national (regional and central DMTs) and international (bilateral parties, NGOs, UN agencies) Study trips ESs adapted according to where they are utilized Multi-level networks	3. Inclusion of ESs and the perspectives of contextual experts into current teaching practices DMT training, LASDEL professional school, Master's in Socio-anthropology and Health, mentoring programme for mid-level teachers/researchers Education	4. Include contextual experts in the creation of national health policies Alliance between national and international initiatives Connection with the media Film documentary to promote ESs Communication for widespread use ESs

There is an awareness that the countries of the South are overly dependent on outside influences and injunctions and have little leeway in manoeuvring their populations and their national leaders. Despite this, the process of endogenizing public health policies seems difficult to adopt into the current strategies of health system reform.

We believe that taking ESs into account, however, opens a potential route that has been insufficiently explored. For this reason, it is crucial to provide an in-depth report detailing how ESs are generated, how they manage to solve problems, and what alternative arrangements they can come up with. The study

on ESs must then lead to a design of training modules developed from empirical data. This type of training can be done in a non-hierarchical fashion to encourage health staff to critically reflect on their own actions and behaviours. What are the real problems they encounter? How do they go about solving them? Is training carried out with a "bottom-up" approach in a locally social context?

Now is the moment to consider how to improve the situation in low-income countries that have unstable healthcare systems. The above approach can be used as a component of a strategy to encourage locals to actively participate in the development of health policy, public action, and health with the assistance of outside providers. This strategy is a potential response to the challenge of putting into practice the idea of inclusive development put forward in the SDG.

We have thus attempted to concretely apply WHO's recommendation (often limited merely to good intentions) and get the viewpoint of national stakeholders about continuing professional education of health personnel: "*The important thing to bear in mind is that the objective is not to impart new knowledge or skills to participants, or even to convince them to accept the proposals or solutions made in the learning workshops. The specific goal is to create an environment where participants can independently decide, plan, and innovate. It is imperative that participants have themselves formulated the decisions and plans that will be adopted."*[58].

[58]Fred R. ABBATT and Alfonso MEJIA. Continuous training of health personnel. Page 4.

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