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Transforming and integrating gender norms and social practices to promote maternal health through male engagement

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Abstract

Numerous studies have shown the positive impact of including men in sexual and reproductive health (SRHR) programs on maternal and child health. Men are generally involved as catalysts or allies to channel this positive impact. In contexts of strong gender inequalities such as Niger, however, it is important to re-examine male participation in SRHR programs. This study examines the implementation of a model designed to empower men in promoting maternal health in the Zinder region of Niger. This qualitative study explores how husbands and community leaders transform gender norms and social practices by designing action plans to promote maternal health. The findings show that husbands and community leaders are aware of their role and of the negative impact of gender inequalities on maternal health. These findings highlight the importance of an approach that focuses on empowering men and promoting their commitment to maternal health. *(Afr J Reprod Health 2025; 29 [6s]: 76-88).*

Keywords: Maternal health, gender, social norms, men, empowerment, Niger

Résumé

De nombreuses études montrent que l'inclusion des hommes dans les programmes de santé sexuelle et reproductive a un impact positif sur la santé maternelle et infantile. Toutefois, les hommes y sont en général associés comme catalyseurs ou alliés par qui transite cet impact positif. Dans des contextes à fortes inégalités de genre comme le Niger, il convient de réexaminer les modalités de cette participation masculine. Cette étude examine le déploiement d'un modèle qui responsabilise les hommes dans la promotion de la santé maternelle dans la région de Zinder au Niger. Une analyse qualitative des séances de réflexions tenues par les maris et les leaders communautaires montre comment ces acteurs transforment les normes et les pratiques sociales de genre pour élaborer des plans d'action sensibles aux valeurs traditionnelles et religieuses. Les résultats montrent que les hommes sont conscients de leurs rôles et de l'impact négatif des inégalités de genre sur la santé de la mère, ce qui dénote la pertinence d'une approche centrée sur leur responsabilisation pour améliorer la santé maternelle. *(Afr J Reprod Health 2025; 29 [6s]: 76-88).*

Mots-clés: Santé maternelle, genre, normes sociales, hommes, responsabilisation, Niger

Introduction

Despite improvements in recent decades, maternal and infant mortality rates remain high in Niger. According to the results of the ENAFEME survey, the infant mortality rate in Niger increased from 51 per 1000 to 72 per 1000 between 2012 and 2021.[1] The low use of pre- and postnatal services is one of the factors that explains this situation. More than two-thirds of Nigerien women (63%) do not attend the minimum of 4 antenatal visits recommended by the WHO and only one in ten women uses a modern contraceptive method.[1]

Unequal gender relations to the detriment of women appear to be a key factor in the low use of maternal health services. Recent studies in Niger have shown the influence of the social environment on women's ability to choose and act on fertility issues.[2–4] The results of the ENAFEME 2021 survey show that in 67% of cases, the husband decides on his wife's health care. Only 32% of women are involved in making such decisions.[1]

The idea of involving men in women's reproductive health programs has been relatively well known since the Cairo Conference in 1994. Studies have shown that involving men improves the use of family planning services and reduces risky behaviors while improving maternal health and communication between partners.[5] These results have been confirmed by systematic reviews

of several low- and middle-income countries.[6,7] These reviews also confirm the benefits of men's involvement in the uptake of antenatal and postnatal care, delivery at a health facility and maternal nutrition.

In Rwanda, the involvement of men and their wives in participatory group discussions has helped to improve the prevalence of contraception, reduce intimate violence against women, and promote men's contribution to the care of children and pregnant women.[8] Wood *et al.*'s recent study in the Democratic Republic of Congo reported that male partners' participation during pregnancy is essential to maternal health.[9]

While working at the individual level has some potential to transform gender relations, Dworkin *et al*. argue that working at the community and social levels has a greater impact on gender transformation.[10] The importance of community-based approaches seems to be confirmed in the case of Niger. Boyce *et al*. compared several strategies to evaluate an intervention targeting married adolescent girls and their husbands and reported that the arm of the intervention that involved small group discussion experienced a greater reduction in intimate partner violence than the arm that involved individual home visits, partly due to a change in the perception of inequitable gender norms.[11] In the context of Niger, numerous initiatives, including the "Husbands' Schools" and "Reaching Married Adolescents" programs, employ the theory of social change to promote male involvement in reproductive health.[3,12]

However, concerns have been raised regarding the potential risks associated with the female domination of programs designed to encourage male participation. Andro and Desgrées Du Loû suggest that the promotion of the male role in women's health must avoid the potential for a resurgence of autocratic male authority in matters of reproductive health, which would be incompatible with women's autonomy in controlling their own bodies.[13] In the case of HIV-positive women in Malawi, Triulzi *et al*. noted that the husband's support can sometimes conceal a form of control that can hinder women's access to healthcare.[14] Finally, involving men in reproductive health programs should not only trigger a dynamic of positive change at the community level but also prevent the risks of domination and control to the detriment of women. The abovementioned studies establish links between women's reproductive health and the factors that change as a result of men's involvement. Men are not directly involved in designing the activities in which they participate. As a result, social norms and practices are not always explicitly taken into account in the design and implementation of these interventions.

This study examines the deployment of a model that provides a twofold corrective approach through the empowerment of men and the inclusion of social norms and practices in the design and implementation of activities to promote maternal health. This is the "Mazan Daga" model that GRADE Africa is currently testing in the Zinder region of Niger. As part of the deployment of this model, we asking a question that is essential to the success of a sustainable transformation of gender relations: how can we integrate men's leadership and attention to gender norms and social practices into a model that promotes endogenous solutions to maternal health problems? We propose answers to this question through a qualitative analysis of group discussion sessions with husbands and community leaders. The aim of this paper is to show how group discussions and men's involvement can be combined to identify and endogenously change gender norms and social practices to promote the use of maternal health services.

Methods

This study used a qualitative approach based on field reports and data collected during reflection and action sessions led by community facilitators with the participation of husbands and community leaders. These reflective dialog sessions were similar to group discussions. However, they differed from traditional group discussions in two ways: the role of the facilitator and the purpose of the discussions.

Community facilitators led the sessions in a semidirective style, but their role was framed by the use of social analysis and action (SAA)-specific tools. The content of the sessions was closely linked to the objectives assigned to the tool (critical analysis, exploration, understanding and questioning, proposing solutions). This structuring of the discussions partly determined the procedures for analyzing the data. Unlike a focus group, a reflection session aims to find a local solution to the maternal health problems identified by the group.

Although the group sessions were not audio-recorded, they were summarized in the form of field reports. These reports were used to complete the analysis of the primary data from the audio-recorded sessions.

Study sites and population

This study was conducted in three health districts in the Zinder region of Niger: Mirriah, Takiéta and Tanout. Together, these three districts have 75 health centers. Using a database from the DRSP/P/AS of Zinder dating back to 2022, 37 health centers were preselected on the basis of the following criteria: a high number of expected pregnancies, low coverage of pre- and postnatal consultations, a low rate of births attended by qualified personnel, and a low prevalence of modern contraception. Based on geographical accessibility criteria and limited resources for the project, 24 health centers were finally selected to implement the Mazan Daga model. These health centers were divided into 11 centers for Mirriah, 7 centers for Tanout and 6 centers for Takiéta. The 24 study communities or villages corresponded to these 24 selected health centers.

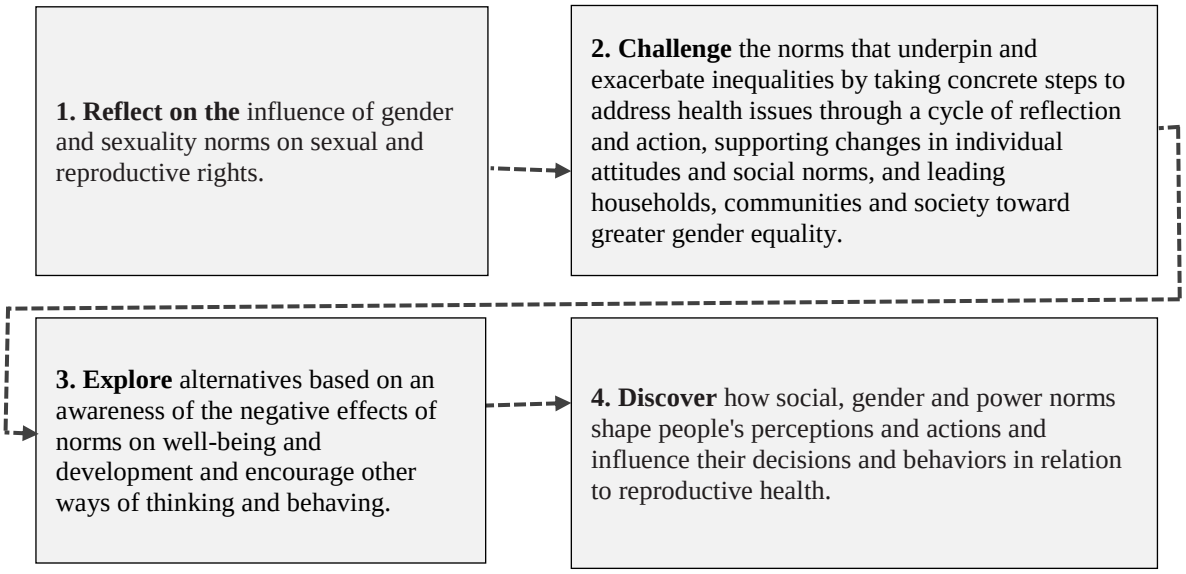
The study population consisted of community leaders and husbands of women enrolled in the antenatal and postnatal counseling component of the program. At each site, the husbands were organized into groups of 15, with one group per site (i.e., 360 husbands for the 24 groups). The groups of community leaders included religious leaders, representatives of women's or youth associations, dignitaries, community health workers, mothers-in-law, opinion leaders and other influential people in their communities. The 24 community leader groups comprised 264 men (62%) and 159 women (38%).

Mazan Daga intervention model

The Mazan Daga model promotes maternal health through men's commitment to transforming social norms. These men, who are committed to identifying and solving maternal health problems in their communities, are called "audacious men" or "avant-gardists", which translates into "Mazan Daga" in Hausa, the most widely spoken language in Niger. The model has two interdependent components: pre- and postnatal consultation groups at the health center level and reflection and action groups at the community level. This study focuses on the second component. It addresses the process of group reflection, problem identification, the co-creation of action plans and their implementation by husbands and community leaders. The husbands' groups consisted solely of the husbands of women enrolled in the pre- and postnatal consultation programs. The community leaders' groups consisted of religious leaders, dignitaries, community health workers, mothers-in-law and other opinion leaders in the intervention communities.

Group reflection and the design of solutions used the SAA approach. Developed by CARE, this approach is a community-led process of social change (Figure 1).[15] It enables communities to explore and challenge social norms, beliefs and practices related to gender and maternal health. Reflections focus on factors that limit women's use of health centers, gender stereotypes, social norms, communication within couples, men's roles, decision-making within the household, danger signs during pregnancy, and the importance of giving birth in health centers. Husbands and community leaders were volunteers recruited at 24 project sites. They were trained and organized into groups of 14 to 16 members with one group of each type per site, for a total of 48 groups. Over a period of 7 months, the groups met 6 times, and each session focused on the use of a specific tool. Each of the six tools had a specific objective, as shown in Table 1.

The sessions were led by community facilitators in a semidirective style. Although there is no consensus on the best choice of facilitators to engage men in a gender transformation process, Gibbs et al. (2015) advocate choosing facilitators with social characteristics similar to those of the participants.[16] In this sense, our choice of facilitators from the intervention communities was relevant. In addition to belonging to the intervention communities, these facilitators were recruited on the basis of objective criteria such as their ability to communicate in the local language (Hausa) and their literacy skills in French. They were then trained by the project team in the SAA approach and facilitation techniques. At the end of the reflection sessions, each group drew up action plans to solve problems or positively transform social or gender norms that hinder maternal health. These plans were endogenous solutions that were proposed by husbands and community leaders and implemented autonomously.



Source: CARE (2017)

Figure 1: Main stages in the social analysis and action process

Table 1: Social analysis and action tools and their objectives

Tools	Objectives
Tool 1 - Gender stereotypes box	Identify and critically analyze typical gender roles, behaviors and norms in the community and how these are maintained or can be changed.
Tool 2 - Sorting piles	Identify and critically analyze the interrelationships between gender and sexual and reproductive health decision-making as well as the factors underlying the presence of these roles and possibilities and ways of doing things differently.
Tool 3 - Vote with your feet	Explore the diversity of opinions regarding commonly held beliefs, expose participants to differences of opinion and offer them the opportunity to reflect on their own attitudes regarding their shared beliefs to understand differences of opinion.
Tool 4 - Problem tree analysis	Understand, analyze and critically question the main causes of the sexual and reproductive health problems identified in the gender analysis; discuss the consequences of these problems.
Tool 5 - Why?	Analyze the underlying causes of gender and sexuality issues with a view toward developing strategies to challenge them.
Tool 6 - Hierarchy of social norms	Prioritize and select the main social, gender and power norms that affect sexual and reproductive health that can be transformed to maximize the impact of the intervention.

Data collection and management

From December 2023 to April 2024 (5 months), 181 discussion sessions were held in the three study health districts, including 102 sessions for community leaders and 79 sessions for husbands. Of the 181 focus group sessions conducted, 29 sessions were audio-recorded, including 14 sessions with husbands and 15 sessions with community leaders. As shown in Table 2, these sessions took place in 5 villages, namely, Droum and Incharoua (Mirriah), Konjanjan and Tirmini (Takiéta) and Boka (Tanout).

The sessions were conducted in the Hausa language and lasted between 55 and 90 minutes. The audio recordings were transcribed into French by a team of two transcribers under the supervision of the Mazan Daga project's social analysis and action manager. For the sessions that were not audio-recorded, the community facilitators took notes of the main ideas that emerged from the discussions, the opinions shared, and the points of divergence.

Table 2: Number of SAA sessions conducted and audio-recorded per health district

Health districts	Sessions with community leaders		Sessions with husbands		Total number of sessions	
	Sessions held	Audio-recorded sessions	Sessions held	Audio-recorded sessions	Sessions held	Audio-recorded sessions
Takiéta	26	6	20	7	46	13
Mirriah	50	4	35	4	85	8
Tanout	26	4	24	4	50	8
Total	102	14	79	15	181	29

They then prepared session reports to supplement the analysis of the primary data.

Data analysis

The data generated by the group sessions were structured according to the 6 SAA tools used. They were analyzed manually, taking into account the structures or categories of analysis offered by each tool. The data from Tool 1 were subjected to a dichotomous analysis that identified the typical roles and norms assigned to men and women. The data from Tool 2 were processed according to a classification of power relationships in decision-making by gender and by decision-making sector (health and economy). The data from Tool 3 were processed through an analysis of the participants' opinions (agree or disagree) on contraception and religion, gender-based violence, the gendered division of labor and decision-making within couples. For Tool 4, the analysis ranked the causes of low attendance by pregnant women at health centers.

The data from Tool 5 were analyzed by comparing social norms according to how they affect women, the reasons for changing them, potential allies and the benefits associated with changing them. The data from Tool 6 allowed us to prioritize social norms according to their impact on women's health, their impact on the household, the benefits associated with changing them, and the possibility of changing them. The action plans were evaluated in accordance with their relevance to the identified problems and the social norms they sought to alter.

Ethical considerations

The research protocol for the Mazan Daga project was approved by deliberation Nº 23/2023/CNERS of April 20, 2023, of the Niger National Health Research Ethics Committee (Comité National d'Ethique de Recherche en Santé du Niger - CNERS). Husbands and community leaders gave their consent to take part in the study after being informed about the project's objectives and the terms and conditions of their participation in the group sessions (e.g., voluntary participation, duration of sessions, guaranteed anonymity).

Results

The SAA component of the Mazan Daga model initiated a transformative process of gender norms in the Zinder region of Niger. The results presented in this section illustrate how the SAA approach enabled husbands and community leaders, assisted by community facilitators, to identify gender-related social norms and practices that hinder the use of reproductive and maternal health services. Group consultation sessions utilizing specific tools permitted these social actors to collectively devise local solutions tailored to their respective contexts with the objective of transforming social norms and practices in favor of maternal health. Finally, the use of the SAA approach had a transformative impact on the attitudes of husbands and community leaders by motivating them to plan and implement concrete actions to improve the use of maternal health services in their communities.

Gender structure of the participants in the focus groups

The SAA sessions were attended by 783 participants, 80% of whom were male. This overrepresentation of men can be explained by their double involvement as both husbands (360 husbands) and community leaders (264 men).

Women participated in the sessions only as community leaders and represented 20% of the total participants. Approximately 50% of the women were mothers-in-law of pregnant women enrolled in

the Mazan Daga "group pre- and postnatal consultations" component. Representatives of women's associations and community relays accounted for 26% and 14% of the participants, respectively.

Identification of social norms and practices inhibiting the use of maternal health services

The gender norms identified by the husbands and community leaders emphasized the image of the strong, dominant man. For the participants, tradition and religion give men the primary social role and responsibility for caring for their families (e.g., subsistence, family health, decision-making). Women were more involved in daily household management and reproductive issues. However, our analyses showed that women's rights to participate in decision-making and manage their health are increasingly recognized. These findings made it easier to identify the religious and social norms that hinder the use of maternal health services.

Traditional image of the dominant man

The analysis of gender stereotypes (Tool 1) reflected the idea of a strong man who is responsible for the needs of his family, including his wife. This finding shows that men play the main role in regulating social functioning: they manage marital conflicts, grant or deny marriages, regulate access to land and make decisions that affect their families and communities. Religion adds other prerogatives, such as being the head of the family, leading prayers, organizing baptism or wedding ceremonies, and burying the dead. However, being a man also has its disadvantages: it is associated with heavy family burdens, such as providing for the family, taking care of children's education, guaranteeing the family's health, and maintaining virility. From a social perspective, the following statement summarizes the prerogatives of men:

"In religion, it's up to the man to lead the prayer, to be the chief of the village, to judge, to slaughter an animal ... For example, in the event of a fire, when someone shouts for help, it's the men who go out. And it's men who marry women, isn't it?" Man, community SAA group member, Tirnimi. The data on sorting decisions (Tool 2) indicate that men are responsible for making the most important health decisions, such as whether to go to the health center or to a traditional healer, whether to space births, and whether to attend antenatal and postnatal consultations. Not taking on these responsibilities can be seen as a weakness:

"Generally speaking, it's the man who makes all the decisions in the household, unless he's dominated by his wife. Some men don't assume their responsibilities by letting their wives run the household. It's normal; they can't say anything because it's the woman who's in charge of food, health and the children's education". Woman, SAA community group member, Kounjanjan.

In the economic sphere, the man is responsible for decisions related to major expenses (e.g., health, marriage, baptism) and recurrent household expenses such as food. The same applies to the purchase and sale of major assets such as fields, livestock, means of transport, and houses.

Emerging trends in the role of women

Women are involved in daily household management and reproductive issues. For example, they prepare food, educate their children, sweep the yard, and collect wood and water. Women are restricted to caring for their family, which limits their access to resources and public space. They must remain subordinate to their husbands and cannot go out without their husband's permission. In economic terms, the wife is often involved in decisions about saving or conserving the couple's assets, especially the harvest. However, if the assets belong exclusively to her, she is free to decide how to use them in consultation with her husband. She has the ability to engage in non-invasive economic activities that do not prevent her from fulfilling her traditional family duties.

With regard to health issues, women have more leeway, especially in relation to contraception. Although it is a religious obligation for women to inform their husbands about their choices, some women use contraception without informing their husbands, as the testimony of a mother-in-law in Tirmini shows:

"Religion requires the husband's agreement. The woman must ask her husband's agreement before starting family planning. Religiously, it's the man who is asked to give his consent. But we see a lot of women who don't ask their husbands for permission to do family planning". Mother-in-law, member of the community SAA group, Tirmini.

Most participants felt that a joint decision was preferable regarding contraception, the number of

children to have and when to have them. However, in the event of disagreement on these decisions, the husband's position should serve as the verdict. As the testimonial below shows, women's role in health decisions is becoming increasingly important:

"There are decisions that are made individually and those that need to be made together. Family planning and visits during pregnancy are matters for the wife and her husband... There are decisions that a man must ask his wife's opinion about because everything in the house revolves around her". Man, member of SAA husbands' group, Droum.

Some believe that men provide for their families and should therefore have the final say on all decisions. Others feel that women also contribute financially to the household and have a better understanding of certain issues in family life, so their opinions should also count to avoid making the wrong decisions.

On the issue of violence against women, the participants agreed that a woman does not deserve to be beaten, even if she disobeys her husband. The participants noted that religion forbids hitting a woman and that this behavior constitutes weakness. Dialog is recommended as the most effective means of settling a disagreement between spouses. However, some minority voices maintained that the man should be the authority and receive respect from his wife, as emphasized in the following comments:

"Everyone agrees that a man who beats his wife is frowned upon and has no dignity. The solution is to talk to her about her mistakes so that she can avoid them next time, but if she refuses to admit her mistakes and does it again, I'll divorce her". Man, group member, SAA husbands, Boka.

Regarding the gendered division of labor, the participants agreed that men are more efficient at work that requires physical effort, while women may be more effective at work that requires patience and delicacy. Others felt that regardless of the type of work, women were less efficient at work because of motherhood and their greater penchant for small talk.

Religious and social norms and barriers to using health centers

Discussions of the links between contraception and religion reveal two main trends. Those who oppose contraception base their arguments on religious advice that believers should have many children. They argue that children are an asset and a blessing and that contraception is an invention of "white men" to limit the population. They add that contraception makes women sterile and that women who use it in the absence of their husbands or after divorce do so to protect themselves from pregnancy while committing adultery.

A second trend involves those who argue that religion is not against contraception and recommends it even in the case of health problems or closely spaced births. They explain that contraception contributes to the well-being of both mothers and children and that having many children can be a source of difficulties.

Opinions are not always exclusive, and some participants support both positions at the same time, as illustrated by the extract below:

"Religion accepts family planning when a woman gives birth close together as this can cause problems and affect her health and that of her children. On the other hand, it is against family planning if it's just because you're tired of giving birth. This practice can give women the green light to commit adultery as they are sure not to get pregnant, and it goes against religious precepts." Woman, SAA community group member, Boka.

Restrictions on women's movement for religious reasons are another gender-related factor that limits the use of maternal health services. Women need their husbands' permission to attend pre- and postnatal consultations. In general, their ability to make decisions and take action in relation to maternal health care is limited.

Sociocultural values are also cited as a factor that hinders pregnant women's use of healthcare services. For example, concealing the pregnancy at its onset is associated with modesty, some women avoid antenatal consultations to protect their status, and pregnancies outside of marriage are concealed. The testimony below highlights the role of sociocultural factors:

"Just recently, a young woman was on her way to the health center to give birth without informing her mother-in-law because she was ashamed. She was so exhausted that she stopped at a village where the women helped her and took her to the health center. After giving birth, her relatives were informed of the scene. She was brave to walk all morning and give birth at the health center even though she was ashamed to inform her family". Man, member of the SAA Communautaire group, Konjanjan.

In addition to sociocultural barriers, there are other barriers to service provision, such as the cost of accessing health products and services, rumors and demands from children. There are also several opportunity costs associated with traveling to health centers, and complications during pregnancy or childbirth can result in unforeseen costs. Additionally, rumors about contraceptive methods and their side effects are cited as reasons for not using contraception. The "race for children", especially in polygamous families, is another barrier to contraception, as highlighted in some group discussions.

The following section shows how negative social norms and practices can be transformed to improve maternal health in a context characterized by the gender stereotypes discussed above.

Co-creating local solutions to transform gender norms and social practices

On the basis of objective criteria such as the expected positive impact and feasibility of change, several social norms related to maternal health were identified and ranked. The norms most frequently identified as priorities for change were those related to the husband's authority within the couple, men's management of resources, and contraceptive practices linked to religion. The analysis of these potential opportunities for change enabled husbands and community leaders to identify the endogenous modalities of their involvement and to formulate concrete actions to positively transform social norms related to maternal health. Table 3

Endogenous ways of getting men involved

The participants agreed that the authority of the husband in managing the economic and health aspects of the household is difficult to change in the short term given its roots in religious and social values. However, the discussions highlighted new opportunities for gender-based social change that husbands and community leaders can use to improve maternal health. These include religious opposition to violence against women, prioritizing dialog in resolving marital conflicts, joint decision-making on health issues, non-opposition between religion and contraceptive practices, and recognition of women's contribution to household management and greater aptitude for certain tasks.

Co-created solutions by husbands and community stakeholders

With the support of community facilitators, the participants in the group sessions co-created several solutions on the basis of the social norms and practices identified, the potential for transforming these norms and practices (feasibility), and their knowledge of the context. For any proposed solution, the members of the SAA groups remain primarily responsible for the activities, while other key members of the community act as allies for change.

There was general agreement that the apparent opposition between religion and contraceptive practices could be gradually overcome, particularly through the involvement of religious leaders through sermons on various occasions, particularly during ceremonies and after Friday prayers. It was decided that members of SAA groups should be accompanied by allies for health-related communication. The allies identified include health workers, especially midwives, community relays and matrons. These allies can attend educational sessions on pregnancy-related risks, awareness-raising sessions on the importance of assisted childbirth, and meetings and discussions on the importance of antenatal and postnatal visits and can provide support for pregnant women from their husbands. A proposed solution to overcome the barriers to women attending health centers was to negotiate a greater degree of freedom for women, particularly through the involvement of mothers-in-law and community leaders. It was suggested that quality maternal health information should be shared on an ongoing basis to reduce the spread of rumors about pregnancy and contraception. Community health workers, mothers-in-law and women's groups were identified as allies.

Transformative impact of the SAA approach and action plans

One of the effects of the community group approach is a change to the mentality of the group members. The brainstorming sessions had a positive effect on the participants, as one member of the husbands' SAA group explained:

"Thanks to the group sessions, I look at my wife differently. Communication with her has improved

Table 3: Gender distribution of participants in group sessions

Health	Community leaders			Husbands	Overall		
District	**Men**	**Women**	**Total**	**Men**	**Men**	**Women**	**Total**
Takiéta	54 (59%)	38 (41%)	92 (100%)	90 (100%)	144 (79%)	38 (21%)	182 (100%)
Mirriah	148 (65%)	79 (35%)	227 (100%)	165 (100%)	313 (80%)	79 (20%)	392 (100%)
Tanout	62 (60%)	42 (40%)	104 (100%)	105 (100%)	167 (80%)	42 (20%)	209 (100%)
Total	264 (62%)	159 (38%)	423 (100%)	360 (100%)	624 (80%)	159 (20%)	783 (100%)

Table 4: Extracts from the action plans developed by the social analysis and action groups

Sites	Activities	Targets	Managers	Allies	Strategy
Bakin Birdji	Visits and awareness raising	Women's groups	Community SAA group	Imam and village chief	Visits to women's groups in the village and discussions on the importance of pregnancy monitoring and the risks of giving birth at home.
Tirmini	Preach	General population	SAA husbands group	Imam of the royal palace	Sermons after Friday prayers on the non-religious basis of certain social norms that are harmful to maternal and child health.
Tirmini	Sensibi-lization	Newlyweds	SAA husbands group	Village griot	Visits to newlyweds' fadas to discuss social norms and practices that are harmful to maternal health.
Tirmini	Educational talks	Women of childbearing age	Community SAA group	Health workers and ASUSU group	Educational talks at women's meeting places (Madaka and ceremonial sites).
Kolera m	Awareness-raising sessions	Pregnant women and mothers-in-law	SAA community group (mothers-in-law)	Village chief, imam and community relays	Organization of awareness-raising sessions for pregnant women on the importance of assisted childbirth.
Guirari	Sensibi-lization	Married men	Members of the SAA husbands' group	Health center midwives	Meetings and discussions with married men in the community on the importance of pre- and postnatal visits and husbands' support for pregnant women.
Guirari	Educational talks	Mothers-in-law	Community SAA group	CSI health workers and matrons	Educational talks with women on the importance of young married women attending the health center.
Gouna	Sensibi-lization	Husbands	SAA husbands group	Husband school members	Raising awareness of the consequences of not allowing women to attend the health center for natal consultations.
Gouna	Raising awareness	Women and young brides	Community SAA group	Women's groups	Raising awareness of negative social norms for maternal health and women's participation in health decisions.

greatly. I've realized how important it is for her to make decisions about the running of our home and especially about her health. What's more, I now look after her health and accompany her on all her visits to the health center to make sure her pregnancy is going well". Man, member of the husbands' SAA group.

Overall, an examination of the action plans proposed by the stakeholders shows that the results of the group discussions were accounted for in the planning. Table 4 provides an extract of the plans drawn broken down by activities, objectives and strategies, those responsible for implementation and their allies.

Analysis of the action plans shows that husbands and community leaders are responsible for implementing the planned activities with the support of a wide range of allies (e.g., imams, village heads, griots, health workers, community relays, matrons, husbands' schools, women's groups). This diversity of actors shows that the Mazan Daga model ensures inclusive participation at the community level. The diversity of the target group and of the activities proposed demonstrates good knowledge of the social fabric and the actors involved in the transformation, particularly due to the SAA approach.

The planned activities and the places they are held demonstrate a strategy of proximity on the basis of direct contact with the target groups. The themes of awareness-raising activities, sermons, educational talks and exchanges with target social groups are responses to problems identified during the social analysis and action sessions. Table 4

Discussion

This study shows how local actors, the majority of whom are men, can analyze gender inequalities and social norms to develop practical solutions to promote maternal health in their communities. In general, previous studies on this topic have highlighted the positive impact of involving men in women's health programs. However, men appear to be "objects" to be used for a specific purpose: improving maternal health. By examining the implementation of the Mazan Daga model, our findings demonstrate the feasibility of a strategy that makes men social actors capable of analyzing maternal health problems and proposing solutions that take into account gender inequalities and social norms.

The results show the persistence of gender stereotypes and social norms that are unfavorable to the promotion of maternal health in the communities studied. The man is perceived as the primary head of the family and, as such, must take care of household matters, including those related to maternal and child health. He must be consulted on all health-related decisions and usually has the final say. Tradition and religion give him authority within the couple and at the social level.

The image of women is associated with submission to men and the need for protection. The primary role of women is limited to the daily management of the household. Beyond this normative dimension, however, the results show that women have room to maneuver, particularly with regard to managing their reproductive lives and making decisions about the economic resources that belong exclusively to them. The group discussions suggested that women do and can continue to engage in income-generating activities as long as these activities do not interfere with their family responsibilities. With respect to violence, the findings emphasize that "only weak men beat women" and that patience and self-control are the qualities of a strong man. This tendency to stigmatize violence against women appears to indicate the emergence of more equitable gender norms.[9,11] However, when combined with the image of the fragile woman who is predisposed to activities such as teaching and nursing, this finding may have a negative connotation for the protection of women. Should violence against women be avoided as an absolute duty or because they are considered weak? This issue recalls reservations expressed by some authors about the risk of women's domination in the context of programs that promote men's participation.[2,13,14]

The main barriers to maternal health are restrictions on women's movement for religious reasons, sociocultural values, the cost of accessing health products and services, and negative social norms. In line with the images of the "strong man" and the "submissive woman", the analysis of these barriers generally points to men's responsibility as holders of power, which supports the intervention logic of the Mazan Daga model. When it comes toproposing operational solutions to remove these

barriers, some of them seem impossible to remove. An analysis of social norms shows that it is not possible in the short term to change the status of the dominant man who "decides everything". Change is only possible in the gaps left by different religious interpretations or in the context of a widened scope for women in certain circumstances. The religious ban on family planning does not receive unanimous support within communities. This finding is consistent with the study by Bazié *et al*. (2024), which shows that contraceptive practice is not accepted by religion (Islam or Christianity) even though it is considered a private matter.[17] Activities are proposed in collaboration with religious leaders, mothers-in-law, community relays and other social actors to convince community members of the benefits of this practice for women's health.

An examination of the action plans proposed by husbands and community leaders reveals a diversity of strategies and actors (stakeholders, targets and allies). With respect to the place of men in the public and private spheres, the Mazan Daga model can improve maternal health in two main ways: social learning and social influence.[18,19] The men who participate in the group discussions can inspire the members of their communities (descriptive norms), and the implementation of the action plans they draw up can lead others to adopt approved behaviors that are favorable to maternal health (injunctive norms).

For an issue focused on women, men appear to be overrepresented in the development of the Mazan Daga model (80% of participants). However, women are at the heart of another component of the Mazan Daga model, group antenatal and postnatal counseling. With husbands and community leaders working to identify problems and propose solutions, there are 142 antenatal and postnatal groups spread across the 24 health centers that enroll a total of 1,528 pregnant women. In addition, the active participation of mothers-in-law in community SAA groups provides an opportunity for power sharing and dialog between men and experienced women. As other parallel analyses from the Mazan Daga project show (Chaibou *et al*. forthcoming), mothers-in-law generally have more authority over husbands than wives do.

In general, the persistence of stereotypes related to men's traditional social roles has not prevented a growing awareness of the importance of men's role in maternal health. Iterative reflection within social analysis and action groups has enabled men to identify and positively transform social norms that are not supportive of maternal health. In contrast to other studies on the same topic, our results reveal signs of improvement in women's place in society and facilitate men's initiatives both within families and at the societal level.

Study strengths and limitations

This study takes into account the diversity of men's roles. Men are involved as husbands, religious leaders, community health workers and dignitaries. Taking this diversity of social roles into account makes it possible to explore men's influence on maternal health from the family to the community level.

However, there may be interactions or synergies between men's roles and the roles of other community actors, such as mothers-in-law, matrons or community relays. This study did not examine these interactions, which may reinforce or weaken men's influence in promoting maternal health. Additionally, men were included in this study as agents of change. Including them as clients or users of reproductive health services would have provided a better understanding of their commitment to improving maternal health.

Conclusion

This study has shown that the implementation of a model centered on the active involvement of men can provide the basis for changing social norms at the community level. For an endogenous transformation of gender relations and sustainable improvements to maternal health, the role of men must go beyond mere participation and take the form of empowerment. In a country with structural gender inequalities such as Niger, these findings can inform the design of male-centered maternal health programs that take into account men's family and social roles.

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References

1. Institut National de la Statistique (INS) & Utica International. *Enquête Nationale Sur La Fécondité et La Mortalité Des Enfants de Moins de Cinq Ans Au Niger 2021*. (2022).
2. Nouhou, AM. Liberté reproductive et recours à la contraception : les influences religieuse et sociale au Niger. *aps* (2016) doi:10.11564/30-2-870.
3. Shakya HB, Challa S, Nouhou AM, Vera-Monroy R, Carter N and Silverman J. Social network and social normative characteristics of married female adolescents in Dosso, Niger: Associations with modern contraceptive use. *Global Public Health* 16, 1724–1740 (2021).
4. Maytan-Joneydi A, MacLachlan EW, Agali BI, Louis-Charles K, Chaibou S, Amadou Garba S, Moumouni AN and Speizer IS.. Providers' views on hormonal family planning methods for young women: a qualitative study from Dosso, Niger. *Gates Open Res* 6, 75 (2022).
5. Wegner MN, Landry E, Wilkinson D and Tzanis J. Men as Partners in Reproductive Health: From Issues to Action. *International Family Planning Perspectives* 24, 38 (1998).
6. Tokhi M, Comrie-Thomson L, Davis J, Portela A, Chersich M, Luchters S. Involving men to improve maternal and newborn health: A systematic review of the effectiveness of interventions. *PLoS ONE* 13, e0191620 (2018).
7. Nkwonta and Messias. Male Participation in Reproductive Health Interventions in Sub-Saharan Africa: A Scoping Review. *International Perspectives on Sexual and Reproductive Health* 45, 71 (2019).
8. Doyle K, Levtov RG, Barker G, Bastian GG, Bingenheimer JB, Kazimbaya S, Nzabonimpa A, Pulerwitz J, Sayinzoga F, Sharma V and Shattuck D. Gender-transformative Bandebereho couples' intervention to promote male engagement in reproductive and maternal health and violence prevention in Rwanda: Findings from a randomized controlled trial. *PLoS ONE* 13, e0192756 (2018).
9. Wood FE, Gage AJ, Mafuta E and Bertrand JT. Involving men in pregnancy: a cross-sectional analysis of the role of self-efficacy, gender-equitable attitudes, relationship dynamics and knowledge among men in Kinshasa. *BMC Pregnancy Childbirth* 24, 444 (2024).
10. Dworkin SL, Fleming PJ and Colvin CJ. The promises and limitations of gender-transformative health programming with men: critical reflections from the field. *Culture, Health & Sexuality* 17, 128–143 (2015).
11. Boyce SC, Minnis AM, Deardorff J, McCoy SI, Challa S, Johns NE, Aliou S, Brooks MI, Nouhou AM, Baker H and Silverman JG. Effect of a gender-synchronized family planning intervention on inequitable gender norms in a cluster randomized control trial among husbands of married adolescent girls in Dosso, Niger. Preprint at https://doi.org/10.1101/2023.09.28.23296292 (2023).
12. Boyce SC, Minnis AM, Deardorff J, McCoy SI, Goin DE, Challa S, Johns NE, Aliou S, Brooks MI, Nouhou AM, Baker H and Silverman JG.. Mediating effects of inequitable gender norms on intimate partner violence and contraceptive use in a cluster randomized control trial in Niger: A causal inference mediation analysis. Preprint at https://doi.org/10.1101/2023.01.12.23284504 (2023).
13. Andro A and Desgrées Du Loû A. La place des hommes dans la santé sexuelle et reproductive : Enjeux et difficultés: *Autrepart* n° 52, 3–12 (2009).
14. Triulzi I, Somerville C, Sangwani S, Palla I, Orlando S, Mamary HS, Ciccacci F, Marazzi MC and Turchetti G. Understanding the meanings of male partner support in the adherence to therapy among HIV-positive women: a gender analysis. *Global Health Action* 15, 2051223 (2022).
15. CARE. Idées et Action : S'attaquer aux Facteurs Sociaux Influençant la Santé Sexuelle et Reproductive. (2007).
16. Gibbs A, Vaughan C and Aggleton P. Beyond 'working with men and boys': (re)defining, challenging and transforming masculinities in sexuality and health programmes and policy. *Culture, Health & Sexuality* 17, 85–95 (2015).
17. Bazié F, Speizer IS, Maytan-Joneydi A, Boukary K, Troaré MF, Agali BI, Onadja Y and Guiella G. "Everyone has their own problems and realities so the religious community cannot judge someone." Contraception motivations and perceived consequences among young contraceptive users who practice a religion in Burkina Faso. *Contracept Reprod Med* 9, 33 (2024).

18. Montgomery MR and Casterline JB. Social Learning, Social Influence, and New Models of Fertility. *Population and Development Review* 22, 151 (1996).

19. Shakya HB, Christakis NA and Fowler JH. Social network predictors of latrine ownership. *Soc Sci Med* 125, 129–138 (2015).