

Strategies for Preventing Teenage Pregnancy and Improving the Lived Experience of Motherhood among Adolescents in Haiti: A Qualitative Study

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ARTICLE INFO	ABSTRACT
<i>Article type:</i> Original article	Background & aim: Teenage pregnancy remains a significant epidemiological and social health problem in Haiti. Its prevention and the improvement of the lived experience of pregnant teenagers appear to be imperative in light of its consequences. This article aimed to identify the traditional, community, and clinical practice recommendations that emerge from the participants' discourse to promote the implementation of strategies that can contribute to the prevention and improvement of the lived experience of teenage pregnancy in the Haitian context.
<i>Article History:</i> Received: 21-Feb-2021 Accepted: 09-Oct-2022	Methods: A qualitative research design developed from Dewey's social inquiry was used. Data were collected from October 2020 to January 2021 in the North and North-East departments of Haiti from 69 participants, including 33 pregnant teenagers, 15 health professionals, 17 relatives of teenagers (partners, guardians, and sisters), and four agency leaders. Thematic analyses were conducted as part of this qualitative study.
<i>Key words:</i> Teenage Pregnancy Prevention Recommendation	Results: This study revealed recommendations to prevent teenage pregnancy in the Haitian context, to improve the transition from teenage pregnancy to motherhood, and to improve the living conditions of teenage mothers and their children. These intervention strategies are categorized into health system, community, family, adolescent, and state policy. Conclusion: The results of this study show that the fight against teenage pregnancy should be a collective responsibility and concern. The engagement of every member of the community is imperative in the quest for a sustainable solution to the problem and for healthy lives.

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Introduction

Giving birth to a human being is considered one of the greatest acts of humanity (1). However, many consequences can be associated with this experience when it occurs in adolescence. This explains why teenage pregnancy has negative consequences for young girls, their children, their families, and society as a whole (2, 3). Adolescent procreation is associated with health problems (2) as well as socioeconomic and educational disadvantages (4). As a result, it remains a concern in both rich and low-income countries, but also an

epidemiological and social public health problem (5, 6). Moreover, adolescent fertility is one of the obstacles identified as limiting the achievement of Sustainable Development Goals (7-9). According to statistics, 95% of teenage pregnancies are recalled in low-income countries (10).

Like all low-income countries, Haiti is marked by relatively high adolescent procreation (11). Based on the results of a recent survey, the fertility rate among Haitian girls aged 15 to 19 is 10%, and 1% of adolescent girls have already

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given birth to at least one child before the age of 15 (12).

This type of pregnancy has many negative consequences for young girls, and for Haitian society as a whole. Haiti is among the eight nations in the world where adolescent girls are most likely to die during pregnancy or childbirth (13). In addition, this type of pregnancy promotes school dropout, poverty, social isolation, religious sanctions, single motherhood, family conflicts, and other consequences (14-15). The consequences of teenage pregnancy inhibit the social and economic ambitions of adolescent girls and teenage pregnancy poses significant challenges, both at the individual and societal levels (11). Yet there is no obvious strategy to prevent adolescent fertility and improve the living conditions of pregnant girls in Haiti. To fill this gap, this study was conducted in the North and Northeast departments, which have a prevalence of teenage pregnancy that exceeds the national average of 11% (12). Considering the need to propose solutions that reflect the culture, values, aspirations, and needs of the population, the qualitative method was chosen to conduct this study. Qualitative research is a valuable tool for examining how things are done in the real world (16). By adopting a qualitative approach, the subjectivity of the participants was taken into account in formulating the recommendations (16-17). This article aims to identify the community and clinical practice recommendations that emerge from the discourse of the participants, supporting the implementation of strategies that can contribute to the prevention of teenage pregnancy in Haiti or improve the experience of pregnancy for adolescent girls.

Materials and Methods

In order to enhance the experience of the participants, the methodology of collecting and analyzing qualitative data was used. Qualitative research makes it possible to interpret phenomena according to the experience and the construction of the participants (16). The qualitative method based on John Dewey's social survey was used (18). Moreover, John Dewey's of pragmatism is adopted as the epistemological position of the study.

For some, Dewey's social pragmatism is guided by abductive reasoning. Arguably such reasoning is important for pragmatism, given that it is the starting point for the search for truth (18). Abductive reasoning is reasoning guided by the desire to explain a phenomenon (18). It leads to the examination of the research hypothesis and to constant reflective analysis based on the empirical data (19). The comparison of the initial hypothesis and the field data have led to the emergence of two hypotheses: that the prevention of teenage pregnancy should prioritize multisectoral approaches and that policies like free prenatal care for teenagers pregnant could reduce the health risks associated with this type of pregnancy.

During this study, 69 participants were recruited, including 33 pregnant teenagers; 17 relatives of pregnant teenagers (partners, mothers, and guardians); 15 health professionals (gynecologist, nurse, nursing assistant, midwife, matron, and health worker); and four agency leaders working with adolescent girls. Participants were recruited from the north and northeast departments of Haiti. Data collection was conducted from October 2020 to January 2021.

To collect the data, the non-probability sampling method was used. This technique consists in taking a sample in a non-random way, without using a sampling frame (20). Semi-structured individual interviews were used as the main collection tool. An interview guide consisting of semi-open questions was designed for each group of participants (e.g., in your experience, can you describe the strategies that could be developed to improve the experience of pregnant adolescents?). Pregnant teenagers were recruited by the non-probabilistic method of an accidental type. Pregnant teenagers were invited to participate in the study by clinicians during their prenatal visit. The remaining participants were recruited using the snowball technique. Interviews with the teenage girls were conducted by a trained nurse, and those of the other participants were conducted by the first author. Interviews were conducted in 8 health facilities participating in this study, with those of the agency heads conducted in their offices. They lasted 60 to 75 minutes. All

interviews were conducted in Creole, the language spoken by all Haitians. They were recorded on an audio medium.

Inclusion and exclusion criteria were considered. All pregnant teenagers living in both departments were eligible. All health professionals and heads of agencies working with pregnant teenagers could take part in the study. All relatives of the adolescent girls participating in the study were eligible. However, violent relatives of pregnant teens were excluded. The adolescent girls were asked questions about their experience of domesticity and domestic violence.

The recordings were listened to and transcribed in verbatim form. The verbatim accounts were read and re-read by the authors to identify relevant themes and categories. After verification and validation, the 69 transcriptions in Word format were exported to QDA Miner version 6.0.5 software for encoding.

To analyze the data thus collected, the researcher used the thematic analysis described by Paillé and Mucchielli (21). As part of this study, the process of continuous thematic analysis was carried out in four stages to see the identification, grouping, subsidiarity and discursive examination of the themes addressed in the corpus of verbatim interviews. This method of analysis makes it possible to construct the thematic tree by considering the hierarchy of themes and categories (21). As part of this study, the researchers first made several careful readings of the verbatims. They noted the relevant themes and categories. During this process, they considered the objective, proposals, and question of the research, as well as the context of the conduct of the investigation. During the course of the analysis, the themes and codes of the tree were grouped into a list of categories and their organization as a whole was proposed. As a result, the author was able to make sense of the data into a comprehensive description of the experience. Abduction, the social survey iterative process of emergent and deductive analysis was performed through continuous case comparisons insuring a pragmatic empirical perspective. Divergent, convergent, and complementary analysis has been done to qualify propositions on the health

system, community, family, adolescent, and state policy intervention strategies.

During the course of the analysis, the themes and categories of the tree were grouped into a list of themes, and their competition was verified. As a result, each of the themes and categories has been sufficiently appreciated to highlight the various characteristics of its contents. Divergent, convergent, and complementary content between themes and categories has been identified. After this step, the salient subthemes were grouped into clusters under different entries (e.g., converging with each other). The clusters grouped the subthemes of the health system, community, family, adolescent, and state policy intervention strategies. In total, the thematic tree contained 16 codes, 5 themes, and 3 categories.

John Dewey's criteria were applied to ensure the reliability and rigor of the data. Thus, the criteria of credibility, saturation, transferability, reliability, and confirmability were considered. To ensure the credibility of the data, the researchers tested the collection tools. The results of the study were discussed with representatives of the participant groups to ensure that they reflected their experience. Data saturation was the reason for ending the data collection. To maintain the transferability of the study, the researchers provided the reader with as complete a description as possible of the various stages of the study and the participants' experiences. To maintain the reliability of the data during their analysis, the researchers went back and forth between the audio recordings and the verbatims to compare the data. The verbatims were coded by both researchers and any discrepancies were resolved by consensus. To ensure the confirmability of this study, the researcher's maintained neutrality in the research process, i.e., they referred to objectivity in the collection and interpretation of data. This study was a part of a PhD thesis, received approval from the Laval University Ethics Committee (# 2020-253/04-11-2020) and the Haitian National Bioethics Committee (# Réf.1921-1).

Results

Sociodemographic data

The total population of the study consisted of 69 participants. The 33 pregnant teenage recruits were between the ages of 14 and 19. Just over half, 19 teens to be exact, were between the ages of 18 and 19 years of age. Relatives were the second largest group of participants in the study, comprising 17 in total. Two-thirds were the mothers of pregnant teenagers, 10 in total, while the number of

partners was very low, i.e. three. The 15 health professionals came from several fields. Two-thirds (10) of these people had more than ten years of experience in reproductive health in adolescence. Finally, four agency heads were recruited. Three of these individuals were heads of state agencies and the other was the head of a community organization. Table 1 provides more details on the socio-demographic profile of the participants.

Table 1. Participants' socio-demographic characteristics

Description	N (%)
Pregnant teenagers (ADO)	
Age (years)	
14 to 15 years	4 (12.12)
16 to 17 years	10 (30.30)
18 to 19 years	19 (57.58)
Marital status	
Single	9 (27.27)
Cohabitation	14 (42.42)
Common-law partner	9 (27.27)
Married	1 (3.03)
Health professionals (PS)	15 (100)
Physician/Gynecologist	2 (13.33)
Nurse Midwife	1 (6.67)
Community Health Nurse	1 (6.67)
Nurse	3 (20.00)
Midwife	1 (6.67)
Nursing Assistant	1 (6.67)
Multipurpose community health worker	2 (13.33)
Matron	4 (26.66)
Relatives of teenager girls (PRO)	17 (100)
Partners	3 (17.65)
Mothers	10 (58.82)
Sisters	2 (11.76)
Aunt	1 (5.88)
Guardian	1 (5.88)
Agency leaders (RES)	4 (100)
Leaders of state agencies	3 (75.00)
Leader of community agency	1 (25.00)

The verbal contributions of the different groups of participants were analyzed according to three themes, namely recommendations for the prevention of teenage pregnancy in light of the Haitian context; improvement of the transition from pregnancy in adolescence to motherhood; and improvement of the living conditions of teenage mothers and their children. Table 2 presents the information on the coding tree.

1) Holistic recommendations for the prevention of teenage pregnancy

Considering the magnitude and negative consequences of teenage pregnancy in Haitian society, most of the participants in the study spoke of "disaster" to explain the situation; others used the expression "unprecedented crisis."

Table 2. Codes, subcategories and categories emerged from data analysis

Codes	Subcategories	Categories
Multisectoral intervention to prevent pregnancy among Haitian teenagers Mass awareness on the issue of pregnancy in adolescence Sex education	Participatory intervention	Holistic recommendations for the prevention of teenage pregnancy
Facilitating access to and use of family planning among adolescent girls Strengthening the capacity of health institutions	Health System Prevention Strategy	
Protection of the sexual and reproductive rights of teenage girls Improvement of the socio-economic conditions of the population Participation of adolescent girls as actors in the prevention of pregnancy	Prevention strategy linked to state policy	
Strengthening the capacity of health institutions to support pregnant teenager girls Free care for pregnant adolescents Psychosocial assistance to pregnant teenagers Social assistance during pregnancy	Health System Prevention Strategy Prevention strategy linked to State and Community policy	Strategies to improve the transition from pregnancy in adolescence to motherhood
Implementation of the Repeat Pregnancy Prevention Policy for Teenage Mothers Empowering adolescent mothers Application of the Responsible Paternity Act State and private sector support	Prevention strategy linked to State and Community policy	Strategies to improve the living conditions of adolescent mothers and their children
Parent support for teenage mothers Partner support for teenage mothers	Relevance of family involvement	

" Therefore, study participants clearly believed that it was urgent to develop prevention strategies adapted to the Haitian reality. Participants proposed several prevention strategies. They will be presented as categories. Adolescent pregnancy prevention interventions are categorized according to the structures (e.g., health system, community, family, adolescent, state) that can be the stakeholder in implementation strategies.

1-1) Participatory intervention

Participants in this study showed the need to involve community groups in the prevention of teenage pregnancy. For participants, church,

school, family, and other community groups can play a role in preventing teenage pregnancy. This categorization contains three codes.

1-1-1) Multisectoral intervention to prevent pregnancy among Haitian teenagers

The majority of participants expressed a belief that the prevention of teenage pregnancy should be achieved in a multisectoral framework. An agency official said,

"All institutions, including churches, should form a coalition. This is how we should fight against pregnancy in adolescence" (RES002). One health professional said, "We need to create multisectoral synergy to fight against teenage pregnancy and help women victims too"

(PS003). Preventing teenage pregnancy should not be a public health issue alone.

1-1-2) Mass awareness on the issue of pregnancy in adolescence

The majority of participants argued that large-scale community outreach is an appropriate way to prevent teenage pregnancy. An agency head put it this way:

"I think that there should be a large-scale mobilization because some things are rooted in the customs of the population, and we cannot change them without a massive mobilization campaign on the issue of pregnancy in adolescence" (RES002). One health professional argued that "We need to mobilize all communities, including the church, popular organizations, health professionals, and others in the fight against teenage pregnancy, so we can solve the problem together" (PS001).

1-1-3) Sex education

Several participants noted that promoting sex education among adolescent girls will help reduce the prevalence of early pregnancy. One teenager said,

"I think we can train young girls by talking to them about the dangers that exist regarding precocious sexuality, so they don't rush into sexuality" (ADO 001). Another participant said, "Health institutions can create mobile clinics to provide sex education and radio stations can broadcast spots to explain to young people the dangers that exist in early pregnancy" (PS013). Sexual and reproductive health remains a taboo subject in Haitian society, and few people dare to address the issue.

1-1) Health System Prevention Strategy

Participants from all groups proposed health system-related inventive strategies to prevent teenage pregnancy. This categorization contains two codes.

1-2-1) Facilitating access to and use of family planning among adolescent girls

More than two-thirds (50) of interviewees stated that the use of family planning could prevent teenage pregnancy. An agency head argued that "From the age of 12 or 14, in other words from the first menstruation, condoms must be made available to adolescent girls so that they can avoid becoming pregnant"

(RES004). One pregnant teenager said,

"I think the state should make it easier for adolescent girls to access family planning information; it should be free and easy to find" (ADO019). To facilitate access to contraceptive products, concrete actions must be taken in Haiti. The implementation of a birth control policy is important. The promotion of family planning should be a priority, as should strategies that meet the needs of adolescent girls. One health professional contended, "If we do not create a birth control policy with a real family planning program, where adolescent girls will find all the means that prevent them from becoming pregnant, we will continue to have a lot of early and unwanted pregnancies in Haiti" (PS003).

1-2-2) Strengthening the capacity of health institutions

The health professionals in this study highlighted the need to strengthen the capacity of health institutions to ensure the implementation of an effective family planning policy for adolescent girls. One health professional said:

"Contraceptives should be provided to health institutions to facilitate free services for adolescent girls and other women" (PS002). For several participants in this study, the increase in the number of health professionals could be relevant to facilitate the implementation of family planning programs for adolescent girls. One health professional said: "The Ministry of Health must increase the number of health professionals to facilitate the educational and health care of adolescent girls before their pregnancy" (PS010).

1-1) Prevention strategy linked to state policy

The majority of participants believe that the state should make certain policy decisions to enable the prevention of teenage pregnancy. This categorization is described in tree codes.

1-3-1) Protection of the sexual and reproductive rights of teenage girls

Some participants were of the belief that law enforcement would protect teenager girls from exploitation and pregnancy. An agency official said,

"... Men who rape young girls must be punished for their act, because punishment has a curative and preventive aspect" (RES002). Another said, "... The full force of the law must be applied. Men who sexually exploit minors must be punished. This is an important element in protecting young girls from sexual exploitation, rape, and pregnancy" (RES001).

1-3-2) Improvement of the socio-economic conditions of the population

Nearly a third (22) of the participants argued that improving the living conditions of the Haitian population could reduce the prevalence of adolescent pregnancy. A health professional opined that

"One of the causes of teenage pregnancy is poverty. As a result, the socio-economic situation of the country should be improved so that the lives of families are better too. This change will affect adolescent girls and prevent early pregnancy" (PS010). Another said, "We need to raise people's economic level because when people have more money, they have better control over their fertility" (PS003).

1-3-3) Participation of adolescent girls as actors in the prevention of pregnancy

Since prevention targets adolescent girls, according to participants, they should involve them in the implementation of different strategies. Some participants stressed the importance of considering the subjective ideas of adolescent girls in an approach to preventing early pregnancy. One health professional said,

"Adolescent girls' grievances must be listened to and considered at the highest levels of government and society in the implementation of prevention strategies" (PS001). One pregnant teenager said, "Now, pregnant teens could educate other non-pregnant teens by telling them about the dangers that exist in early pregnancy and the suffering they experienced because of their early pregnancy" (ADO013).

2) Strategies to improve the transition from pregnancy in adolescence to motherhood

Often, pregnant teens face many challenges during the transition from pregnancy in adolescence to motherhood. Interventions addressing these challenges can improve their transitional experience. The categories outlined below present the various recommendations of

the participants. As in the previous section, the codes are categorized.

2-1) Health System Prevention Strategy

Participants stressed the importance of health care for pregnant adolescents and also the health system to ensure medical care for these people. This categorization has two codes.

2-1-1) Strengthening the capacity of health institutions to support pregnant teenager girls

A few participants mentioned that strengthening the provision of prenatal care services in health institutions could help pregnant adolescent girls. One health professional said,

"I think the state should provide medicines, ambulances, and competent health professionals able to help pregnant adolescents" (PS002). Another said, "Often these girls' parents are destitute; when the girls come here, it's really hard for us to help them. The hospital should provide material resources to help pregnant teenagers" (PS012).

2-1-2) Free care for pregnant adolescents

All participants saw free prenatal care for pregnant adolescents as a protective element. One health professional opined,

"I think facilitating free prenatal care can help teenage girls during pregnancy" (PS001). A pregnant teenager argued that "The state could offer us free health care. I don't come to the hospital because I have no money" (ADO031). One health professional said, "There are adolescent girls who come to prenatal consultation and have no way to buy even a tablet, so they no longer come back to the hospital" (PS002).

2-2) Prevention strategy linked to State and Community policy

Participants felt that the state, community agencies, and others in society should provide psychological and social assistance to adolescents during pregnancy. This categorization contains two codes.

2-2-1) Psychosocial assistance to pregnant teenagers

Some participants saw the need for psychosocial care for these teenager girls. One health professional explained the issue this way:

"I think that psychological support during pregnancy is extremely important for these teenagers because they are going through a rather difficult period. Sometimes there are family pressures, and they experience pregnancy as a very stressful event (PS007). Other participants felt that psychosocial support should go beyond the boundaries of health institutions. For one health professional, "psychosocial care should also be provided outside hospitals, in homes and communities" (PS003).

2-2-2) Social assistance during pregnancy

Providing social assistance to adolescent girls during pregnancy could have positive impacts on the experience of teenage pregnancy. Excerpts from the verbatim transcripts of conversations with pregnant teenagers in the study bear witness to this possibility.

"The state should help us buy things for the baby because we don't have the means to buy everything" (ADO002). Pregnant teens and relatives in this study received no social assistance during the transition from pregnancy to motherhood.

3) Strategies to improve the living conditions of adolescent mothers and their children

Given the harmful long-term consequences of teenage pregnancy, participants in this study proposed recommendations that could help teenage mothers and their children. They are reported under the following codes. The codes are grouped into several categories.

3-1) Prevention strategy linked to State and Community policy

To ensure the well-being of adolescent mothers and their children, political and community measures are important in this perspective. This categorization has four codes.

3-1-1) Implementation of the Repeat Pregnancy Prevention Policy for Teenage Mothers

Nearly one-third (nine) of the pregnant teenagers in this study were experiencing at least their second pregnancy. These young mothers pointed out that their already difficult living conditions deteriorated further with their new pregnancy. To ensure the well-being of teenage mothers, a few participants mentioned

the need to help them avoid further pregnancies. One relative said,

"Adolescent girls should be counselled to practice family planning after childbirth to protect themselves from a new pregnancy" (PRO001). One health professional said, "Adolescent mothers need to be offered counselling and a contraceptive method. Family planning is extremely important; it will help them plan for their future" (PS007).

3-1-2-) Empowering adolescent mothers

A few participants mentioned that facilitating the autonomy of adolescent mothers is the best strategy for improving their lives and the life of their child. A relative of a pregnant teenager said, "We need to help teenage mothers find an economic activity, for instance by starting a business, because it is difficult for them to go back to school. In this way, they would be independent and be able to feed their child" (PRO001). One agency official explained, "There should be a special school for these mothers. This school should offer them a trade at the same time, so they would be able to provide for their own needs" (RES002).

3-1-3) Application of the Responsible Paternity Act

Nearly all (nine) of the pregnant teenagers in this study are single. They will be single mothers in the near future because their partners refuse paternity. Some participants stressed the need to enforce the law on responsible paternity, particularly on behalf of teenage mothers. One health professional said,

"We need institutions that help teenage mothers convince their child's father to do his paternal duty because many of these dads are irresponsible in this regard" (PS003). A mother of a pregnant teenager said, "Adult men have ways to take care of their child, but they don't bother to do so. The state should confiscate their property to take care of the child because teenage mothers are not able to look after their offspring "(PRO001).

3-1-4) State and private sector support

All participants emphasized the role of government and the private sector, including non-governmental organizations (NGOs), in improving the living conditions of adolescent

mothers and their children. One pregnant teenager said,

"The state should give teenage mothers money and other things to take care of their baby, so that the newborn won't suffer" (ADO033). According to one health professional, "The state and NGOs must help adolescent mothers to become autonomous, so they will no longer be victims of prejudice and discrimination" (PS001).

3-2) Relevance of family involvement

Participants stated that family support is important for the well-being of teenage mothers. This categorization is presented in the following codes.

3-2-1) Parent support for teenage mothers

All participants contended that parental support is important for the well-being of teenage mothers. A mother of a pregnant teenager said,

"Parents want to take responsibility for their daughters after pregnancy; they must supervise them in this difficult time" (PRO006). Co-parenting appears to be a useful alternative for teenage mothers.

3-2-2) Partner support for teenage mothers

Partner support is also important for teenage mothers and their children. One health professional said:

"Partners of teenage mothers should be encouraged to take on themselves and their children. This is important for the mental and physical health of teenage mothers" (PS006). Partner support could save teenage mothers from some of the negative consequences of early motherhood. A partner of a pregnant teenager said, "I make sacrifices to support my wife during her pregnancy and after giving birth to protect her from social and economic hardship. I am there for her and for my child in every circumstance" (PR002).

Discussion

The results of the study have shown that the prevention of teenage pregnancy should not focus solely on promoting the use of contraception or on sex education concerning the anatomy of the adolescent girl. The findings sparked other recommendations, such as multisectoral intervention, protection of

adolescent girls' sexual and reproductive rights, mass awareness-raising, involvement of adolescent girls in the implementation of programs, and improvement of the living conditions of the entire population. Hence, our findings included a range of recommendations to help pregnant teens during the transition to motherhood and beyond. The aim is to facilitate access to prenatal care, provide social and psychological assistance to pregnant adolescents, support adolescent mothers and foster their autonomy, and prevent a second pregnancy among these mothers.

Our results suggest the importance of participation in preventing teenage pregnancy. Participants in the study cited mass awareness and multisectoral interventions to forestall this negative outcome. Several previous studies have highlighted the relevance of these types of interventions to reduce the prevalence of teenage pregnancy (22, 23). Prevention is a collective activity (24). The involvement of various sectors of national life in the implementation of prevention strategies can create a critical mass in favor of combating teenage pregnancy. In addition, consciousness-raising and community participation can promote public awareness of undesirable consequences and help to eliminate certain stereotypes about fertility. The participants with whom we spoke suggested that the experience of adolescents be considered in the implementation of prevention strategies. Decision-makers must be sensitive to the subjective experience of these girls and their view of their own sexuality (25). This is one of the most important levels at which support, and advice could prove effective, especially from the perspective of developing a greater quest for autonomy in the home environment.

The results of the study suggest family planning and sex education as effective strategies to prevent early pregnancy. These findings are consistent with previous studies that have described the relevance of promoting abstinence, sex education, and contraceptive use among adolescent girls as the privileged means of preventing pregnancy (26-27). In the Haitian context, the fight against the denial of recognition could help combat the socio-cultural taboos that accompany family planning and sex

education.

Discussions with participants revealed that economic redistribution could help prevent early pregnancy. According to our results, improving the socioeconomic living conditions of the Haitian population would reduce the prevalence of procreation in adolescence. Previous studies have highlighted the link between poverty and the occurrence of teenage pregnancy (8, 28). Interventions to reduce poverty among adolescent girls can have transformative power and more lasting impacts on their future sexual and reproductive health outcomes (29). Poverty reduction is likely to prevent early pregnancy in Haiti because a child is considered an asset for the poor. Contrary to the conclusion of the study of Todd and Black which proposed only the use of contraception to prevent teenage pregnancy (30). Our study proposed several intervention strategies to prevent teenage pregnancy, including actions on social determinants.

Our results showed the need to address the intersection of a range of social inequalities to improve the transition to motherhood in adolescence. Strengthening the capacity of Haitian health institutions in terms of equipment and competent professionals would help to improve the care offered to pregnant teenagers. Free care was often cited by participants as a strategy to facilitate adolescent girls' adherence to prenatal norms. One systematic review highlighted that a lack of adolescent-friendly services, a lack of trust in health care providers, and a lack of economic means prevented adolescent girls from meeting prenatal norms (29). Facilitating access to care allows compliance with prenatal standards, but it also reduces the risks for the girl and her baby. The results confirmed that social assistance is necessary for pregnant teenagers. These findings are consistent with previous studies that highlighted the positive impact of social support for pregnant adolescents (31-32). Participants suggested the implementation of psychosocial interventions to help pregnant teenagers. Several studies mentioned the role of psychosocial support in reducing stress and mental health problems in these teenagers (32-33).

Our results included recommendations to ensure the well-being of teenage mothers and their children. Participants mentioned the need for interventions to foster the autonomy of adolescent mothers. Financial support for small business start-ups could be offered to mothers unable to return to school. As for the others, they would need a trade school to provide access to a profession. A Ugandan study showed that vocational training could be useful in supporting girls and empowering them to make positive choices (24). Another study revealed that empowering adolescent girls has a positive impact on reducing adolescent mothers' sexual risk-taking behavior and improving their self-care and the care they provide for their children. (34). No results specifically suggested promoting family support for teenage mothers. However, parental support, including co-parenting for teenage mothers, clearly facilitates the well-being of the girls and their children. These findings are consistent with previous studies showing that family support is important for teenage mothers, including practical support from their own mothers (33, 35).

Our results suggested that government and NGOs need to implement programs and policies aimed at improving the living conditions of young mothers. These bodies should provide assistance for adolescent mothers and foster their autonomy. Our results suggested offering these mothers a contraceptive method to help them prevent a new pregnancy and secure their future. An earlier study showed that the use of long-acting reversible contraception reduces repeated pregnancy in adolescent girls (36).

This study proposed to act on social determinants by involving and listening to stakeholders in order to address the problem, providing an alternative to the prevailing biomedical vision of teen mothers. This study shows the need to reconcile biomedical and community-based strategies to prevent teenage pregnancy, as well as improving the experience of pregnant teens and teenage mothers. No single strategy could deliver effective results. However, the study has limitations. The study group was limited to pregnant teenagers, their relatives, health professionals, and heads of institutions working with these adolescents. The involvement of other actors such as local

authorities, religious institutions, and others may well have led to other recommendations. Taking a participative science perspective is to be encouraged as it provides insight into the diversity of experiences and may be conducive to political innovations and transformed practices.

Conclusion

The results of this research made it possible to verify the working proposals. They proposed strategies to prevent pregnancy to adolescence in the Haitian context, improve the transition from pregnancy in adolescence to motherhood and improve the living conditions of adolescent mothers and their children. The recommendations proposed by the participants present an important asset for the management of the issue of adolescent pregnancy and early motherhood in Haiti, although the implementation of these recommendations would entail social and economic costs. The results showed that the fight for healthy pregnancies should be a collective responsibility and concern, and the involvement of each member of the community is necessary for the search for a sustainable solution.

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Conflicts of interest

Authors declared no conflicts of interest.

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