



Soccer and sexual health education: a promising approach for reducing adolescent births in Haiti

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ABSTRACT

Objective. To explore the effect of an innovative, integrative program in female sexual reproductive health (SRH) and soccer (or fútbol, in Haitian Creole) in rural Haiti by measuring the rate of births among program participants 15–19 years old and their nonparticipant peers.

Methods. A retrospective cohort study using 2006–2009 data from the computerized data-tracking system of the Haitian Health Foundation (HHF), a U.S.-based nongovernmental organization serving urban and rural populations in Haiti, was used to assess births among girls 15–19 years old who participated in HHF's GenNext program, a combination education–soccer program for youth, based on SRH classes HHF nurses and community workers had been conducting in Haiti for mothers, fathers, and youth; girl-centered health screenings; and an all-female summer soccer league, during 2006–2009 ($n = 4\ 251$). Bivariate and multiple logistic regression analyses were carried out to assess differences in the rate of births among program participants according to their level of participation (SRH component only (“EDU”) versus both the SRH and soccer components (“SO”) compared to their village peers who did not participate. Hazard ratios (HRs) of birth rates were estimated using Cox regression analysis of childbearing data for the three different groups.

Results. In the multiple logistic regression analysis, only the girls in the “EDU” group had significantly fewer births than the nonparticipants after adjusting for confounders (odds ratio = 0.535; 95% confidence interval (CI) = 0.304, 0.940). The Cox regression analysis demonstrated that those in the EDU group (HR = 0.893; 95% CI = 0.802, 0.994) and to a greater degree those in the SO group (HR = 0.631; 95% CI = 0.558, 0.714) were significantly protected against childbearing between the ages of 15 and 19 years.

Conclusions. HHF's GenNext program demonstrates the effectiveness of utilizing nurse educators, community mobilization, and youth participation in sports, education, and structured youth groups to promote and sustain health for adolescent girls and young women.

Key words

Women's health; adolescent health; pregnancy in adolescence; soccer; Haiti; Latin America; Caribbean region.

Approximately 16 million adolescent girls 15–19 years old give birth each year,

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accounting for 11% of all births worldwide (1). Complications during pregnancy, delivery, or post-delivery are the leading cause of death for girls during late adolescence (2). Adolescent pregnancy has been associated with a myriad of poor proximal and distal health outcomes for both the mother and the child during pregnancy, labor, and post-

delivery. It can also contribute to negative physical and psychosocial consequences for the mother and the child (3–9). Adolescent mothers who give birth are more likely to experience prenatal and postpartum depression and less likely to stay in school, often due to financial constraints, stigma, or discriminatory school policies (4, 10, 11). The physical conse-

quences of adolescent pregnancy and/or giving birth include unsafe abortions, postpartum hemorrhage, anemia, sepsis, and obstructed labor (10–14). A number of macro- and micro-level factors can cause disparities in the adolescent birth rate among different communities. These include access to/availability of sexual and reproductive health (SRH) services and education; gender equality and equity; poverty; education and employment opportunities; racial/ethnic equality and equity; and gender-based violence (15, 16).

Adolescent girls 15–19 years old comprise 11.7% of the total Haitian population, and UNICEF estimates that 23% of the Haitian population is between 10 and 19 years old (2). The Demographic and Health Survey (DHS) in Haiti (2012) states that women’s average age at first birth is 21.4 years (17), and a study by Gómez et al. conducted in a youth center in Port-au-Prince showed that more than half of the young women surveyed experienced their sexual debut between 15 and 17 years of age (18). Haiti has limited family planning services and there are multiple structural and cultural barriers to providing reproductive education and services (19–22). In addition, young women and girls are likely to engage in transactional or survival sex through cross-generational sexual relationships to pay for food, housing, and schooling (22, 23). Finally, the imbalanced gender and power hierarchy and severe poverty in the country puts adolescent girls at risk for early pregnancy (before age 19), sexually transmitted diseases (STDs), HIV, and sexual violence (17, 18, 22, 23). Early pregnancy contributes to Haiti’s maternal mortality rate of 380 per 100 000 (range: 220–680) (24). Some reports indicate that sexual violence and transactional sex have increased and SRH has severely deteriorated in Haiti following the earthquake of 2010, political turmoil, multiple hurricanes, and a persisting cholera epidemic (25–27).

Participation in sports can be a major vehicle for change (2) at the individual, interpersonal, community, and societal levels. Positive youth development (PYD) programs that combine education and sports activities specifically for girls, such as the Mathare Youth Sport Association in Kenya (28); Right to Play, which implements programming globally, but predominantly in African countries (29); Grassroots Soccer in Southern and West-

ern Africa (30); and the Ishraq program implemented in Egypt (31, 32), have documented positive outcomes. Many of these programs receive extensive donor funding and include a built-in research/evaluation component. However, some community-based organizations and schools around the world that implement PYD programs using sports may not have the funding to publish reports documenting their effectiveness. While many youth sports and wellness programs include an SRH education component, most of them assess changes in SRH knowledge as opposed to measuring changes in SRH outcomes. The quantitative program outcome evaluation reported here explores the impact of an innovative, integrative program in SRH education and soccer (or *fútbol*, in Haitian Creole) in rural Haiti by measuring the rate of births among program participants 15–19 years old and their nonparticipant peers.

MATERIALS AND METHODS

Scope of the evaluation

Overall organization and program description. This study evaluated the GenNext program, an integrated SRH–soccer intervention run by the Haitian Health Foundation (HHF),³ a U.S.-based nongovernmental organization (NGO) that serves an urban and rural population in the Grand Anse region of southwestern Haiti, with administrative headquarters in Jérémie. HHF’s public health program began in 1987 and uses a population-based primary care approach. The foundation of its service delivery consists of *agents de sante* (community health workers or CHWs) selected by their communities for government-recognized training in basic primary health care. CHWs are paid by HHF to provide health coverage (health education, prevention, assessment, treatment, and referral) to a population of 2 000–3 000 people. CHWs also facilitate groups for mothers, fathers, and youth in each village. All households in rural HHF service areas are registered through a census that is updated every 5–7 years. The public health program serves a registered rural population of 128 217 (33, 34) in parts of four counties in Grand Anse. The health information system (HIS) is a

computerized database with information on family registration, health services, and outcomes, and is used to report vital statistics to the government.

In 2005, with support from AmeriCares,⁴ HHF designed GenNext, a combination education–soccer program for youth based on SRH classes HHF nurses and CHWs had been conducting in Haiti for mothers, fathers, and youth. The program consisted of 1) SRH courses, 2) Girls’ Health Days, 3) an all-female summer soccer league, and 4) World AIDS Day community mobilization events. The foundation of the program consisted of existing youth groups supported by CHWs and enhanced through the GenNext program. Starting in 2006, funded by the Conrad N. Hilton Fund for Sisters,⁵ GenNext narrowed its focus to adolescent girls, as both CHWs and HHF staff saw the need to provide a program specifically focused on that age group to support SRH education, build agency among participants, and address gender norms related to women and sports. About 17 villages were selected to participate in the yearlong GenNext program each year (with 21 villages participating during the 2006 program cycle evaluated here). The length of time a village was classified as “participating” in GenNext varied depending on when the nurse educators were available to carry out each segment of the program. Typically, the SRH component was implemented in January–April, the soccer program in May–September, and preparations for and implementation of World AIDS Day activities in October–December. Youth group activities were typically implemented throughout the year to complement specific program activities. Villages were selected based on their *commune* (region) and geographic location within it (i.e., their proximity to that year’s program service area), and whether or not they had participated previously (those that had were not included in another complete program but received “maintenance funding” to support youth groups with continued SRH education and *fútbol* clubs). Within each GenNext service area (across all participating villages), about 30 (25 to 40) girls

⁴ Nonprofit disaster relief global health organization based in Stamford, Connecticut, United States; www.americares.org

⁵ Hilton Foundation fund supporting the apostolic work of Roman Catholic nuns (Agoura Hills, California, United States).

³ www.haitianhealthfoundation.org

12–19 years old with HHF household registration numbers and no previous participation in GenNext were selected for the program. Participants were recruited from existing youth groups and from the HHF household census list. The program evaluation reported here included anyone who participated in the SRH or soccer component during the 2006 program cycle.

GenNext SRH component. The education component of the GenNext program consisted of five two-hour SRH sessions, typically conducted over one week, and taught by HHF nurse educators.⁶ The curriculum included male and female anatomy; changes during puberty, menstruation, and the fertility cycle; STDs and HIV; and sexual negotiation role-plays. Each participant completed a pretest and a post-test before and after completing the program to assess her acquisition of knowledge about the topics that were covered. As a follow-up to the five education sessions, GenNext curriculum topics were in bi-monthly or monthly youth group meetings held by CHWs throughout the year. The youth groups were not mandatory and were open to all youth in the area. The participation of specific youth in the youth groups was not tracked as part of this evaluation.

GenNext health screening. Eligibility for the soccer component of the program was based on 1) completion of the SRH component and 2) the results of blood pressure, body mass index (BMI), and hemoglobin assessments carried out by HHF nurses, CHWs, and volunteer student nurses during “Girls’ Health Days” held in central locations. Lists of the young women who completed the SRH component were used to assess how many of the course participants attended the health screening. Participants who were anemic were given iron supplements and severe cases were referred to the health clinic. Tetanus vaccines were administered to all girls 15 years old or older. Every participant received a “passport-to-health” card for recording height and weight, hemoglobin level, and vaccines, and for tracking menstrual cycles. The card was recognized at HHF’s main clinic in Jérémie, ru-

ral mobile clinics, and the government hospital and clinic. Any program participant who successfully completed the GenNext SRH component and the health screening and was not anemic was eligible to play in the all-female summer soccer league.

GenNext soccer component. Soccer coaches for the all-female summer league were selected from the local community by CHWs and community leaders. Each soccer team received soccer equipment and a small amount of direct financial support from a community-selected coalition to purchase water and oranges for soccer practice and games and the necessary ingredients for oral rehydration serum (ORS). Games were typically held once per week and had high community attendance (usually several hundred people). HHF staff members and members of the village youth groups attended all games to promote community health education. Youth group members carried banners with various health messages. The all-girl soccer teams typically practiced daily all summer. In 2008 it was observed that the coaches in the participating communities were predominantly male. Therefore, HHF partnered with a Haitian women’s soccer program, including one female coach, from a nearby community outside the HHF service area, to send 10 previous GenNext participants to be trained as youth soccer coaches at L’Athlétique d’Haïti, a soccer organization in Port-au-Prince. These young women then returned to their respective villages to 1) coach soccer teams for adolescent girls and 2) serve as female health mentors for team members.

GenNext World AIDS Day. Each year the GenNext program cycle ends on December 1—International AIDS Awareness Day—when program participants and other youth group members host health edutainment⁷ events and the top two teams from the GenNext summer soccer league compete in an All-Star match that garners extremely high turnout from the participating and surrounding villages. The health edutainment events and soccer game are also broadcast on the radio in Jérémie and in the surrounding villages.

Quantitative analysis

A retrospective cohort study design was employed to conduct the program evaluation’s quantitative analysis. All data were drawn from GenNext program records and the Visual FoxPro database (Microsoft Corporation, Redmond, Washington, United States) of HHF’s HIS for the 2006–2009 period. Adolescent girls who had participated only in the SRH component of GenNext or in both the SRH and soccer components were eligible for inclusion in the evaluation. Typically, about 20 of the 25–40 girls in each village who participated in the SRH component also participated in the soccer component. The nonparticipant group was composed of adolescent girls of the same age (15–19 years) who resided in the participating villages during the 2006 program cycle (January–December). The 2006 program year was chosen for analysis to allow for the maximum amount of time between the girls’ completion of the program and the end of the study’s observation period. Exposure to the program was categorized as 1) successful completion of the SRH component only (“EDU”), 2) successful completion of the SRH component plus participation in the summer soccer league (“SO”), and 3) no participation in any part of the program (“NON-PROG”) (i.e., the control group). The study outcome was defined as childbearing among the study participants between the ages of 15 and 19 years at any point from 1 January 2006 to 15 August 2009. The mean age for participants in all three groups (EDU, SO, and NON-PROG) and pretest and post-test scores for the EDU and SO groups were also compared. Study participants were excluded if they had given birth prior to their village’s participation in the GenNext program or within nine months of completing the program’s SRH component.

A bivariate analysis (exposure and outcome) was conducted using the chi-square test, and bivariate and multivariate logistic regression analyses of data across the three participant groups were conducted using odds ratios (ORs). Hazard ratios (HRs) for childbearing for those 15–19 years old across the three groups were also estimated, using a Cox regression model. “Time at risk” for childbearing, for both the GenNext program participants and the nonpartici-

⁶ Registered nurses with advanced education who are also teachers.

⁷ Entertainment through games, films, etc. designed to educate.

pants from the same village, started nine months after the GenNext participants completed the program. Study participants' childbearing data were recorded as either "has given birth" (plus the birth date of their baby), or "has not given birth" (with a date of 5 August 2009, the end of the study observation period). To examine time-dependent associations, an age/time interaction variable (age upon completion of the GenNext adolescent program and number of days to giving birth) was included in the analysis. A limited number of likely confounding variables (socio-contextual factors related to adolescent pregnancy) were relevant to the analysis due to the retrospective nature of the program evaluation. The authors recognize that, ideally, several of these variables should have been included in the analysis, but only the information captured by HHF in its routine HIS GenNext program data collection was available for use at the individual level. Therefore, the only confounding factors that were included were based on observed associations between program exposure and outcome, and the researchers' specific knowledge of geographic and economic differences across villages and *communes*.

Ethical considerations

This program evaluation was reviewed and approved by HHF's Ethical Review Committee.

RESULTS

The study sample for the GenNext program evaluation included 756 female

program participants 15–19 years old and 3 495 female nonparticipants from the same age group from 21 different villages spanning two *communes* within the Grand Anse region (Table 1). A total of 441 girls participated only in the SRH component (EDU) and 315 girls participated in both the SRH and soccer components (SO). The mean age during the program education sessions was slightly more than 15 years across the three study groups (EDU, SO, and NON-PROG) (15.26, 15.39, and 15.27 respectively) and the mean childbearing age was about 19 years. There were no significant differences for either variable across the three study groups. Between the EDU and SO groups, there was no significant difference in the change in knowledge scores for the pretests and post-tests. The percentage of girls who gave birth between the ages of 15 and 19 years was 3.17%, 4.44%, and 4.78% for the EDU, SO, and NON-PROG groups respectively ($\chi^2 = 2.3167$; $P = 0.3140$). For those who gave birth during that age range there was on average a significantly greater number of days between completion of the program and childbearing for those in the SO group versus those in the EDU group (F -test value: 22.44; $P < 0.001$).

Results from the logistic regression showed that participation in the SRH component (EDU) was the only significantly protective factor (OR = 0.535; 95% confidence interval (CI) = 0.304, 0.940) after adjusting for age at participation and village of residence, with fewer days to giving birth for girls who did compared to those who did not (Table 2). Participation in the soccer component

as well as the SRH component (SO) was protective but not at statistically significant levels (OR = 0.819; 95% CI = 0.465, 1.442). Table 2 and Figure 1 show the HRs from the Cox regression analysis for the three groups. The EDU group (HR = 0.893; 95% CI = 0.802, 0.994) and to a greater degree the SO group (HR = 0.631; 95% CI = 0.558, 0.714) were protective at a statistically significant level, even after adjusting for age at participation, village of residence, and the age/time interaction variable (age upon completion of the GenNext adolescent program and number of days to giving birth).

DISCUSSION

The study findings show that young women 15–19 years old who participated in the GenNext program had lower birth rates than those who did not (the NON-PROG group). In addition, participants in the combination SRH–soccer program (SO) had a lower likelihood of early pregnancy/childbearing (before age 19) than those who participated only in the SRH component (EDU). While the study's initial analysis suggested that participation in the EDU group was more protective against early pregnancy/childbearing than participation in the combined intervention (SO), the Cox regression analysis HRs indicated that SO participants had the lowest risk of outcomes across all three groups. Whether the girls who choose to play soccer have other internal protective factors which influence timing of pregnancy or whether their participation in the soccer component of the GenNext program was truly an influencing factor cannot be determined. Interestingly the results showed no significant difference in SRH knowledge gained between the EDU and SO groups. This suggests that playing soccer (in this context) as a component of a larger SRH program provides a unique protective component.

This program evaluation demonstrated the beneficial effects of a comprehensive wellness and sports program specifically focused on adolescent girls at both the individual and community level. However, the difference in number of days to giving birth across different study groups did not differ significantly. Therefore, this program should be viewed as a base from which a larger, more comprehensive, combina-

TABLE 1. Characteristics of a selected group of adolescent female residents ($n = 4\ 251$) of 21 villages that offered a combination sex health education–soccer program ("GenNext"), by participation level, Haiti, 2006

Characteristic	Girls who did not participate in education or soccer component	Girls who participated in education component only	Girls who participated in both education and soccer components
Total no. (%)	3 495 (82.22)	441 (10.37)	315 (7.41)
Gave birth between 15 and 19 years old (%) ^a	4.78	3.17	4.44
Mean age during program sessions (in years)	15.27	15.26	15.39
Mean age at time of giving birth (in years)	19.01	19.10	19.02
Pretest / post-test change in knowledge score	— ^b	34.35	33.10
Mean time (in days) to giving birth from last day of program ^c	909.424	840.11	910.21

^a $\chi^2 = 2.3167$; $P = 0.3140$.

^b Not applicable.

^c $P < 0.001$.

TABLE 2. Crude and adjusted odds ratios (ORs) and hazard ratios (HRs) for giving birth between the ages of 15 and 19 years old among girls ($n = 4\,251$) from 21 villages who participated in a combination sex health education–soccer program (“GenNext”), by type of participation, compared to their nonparticipant peers, Haiti, 2006

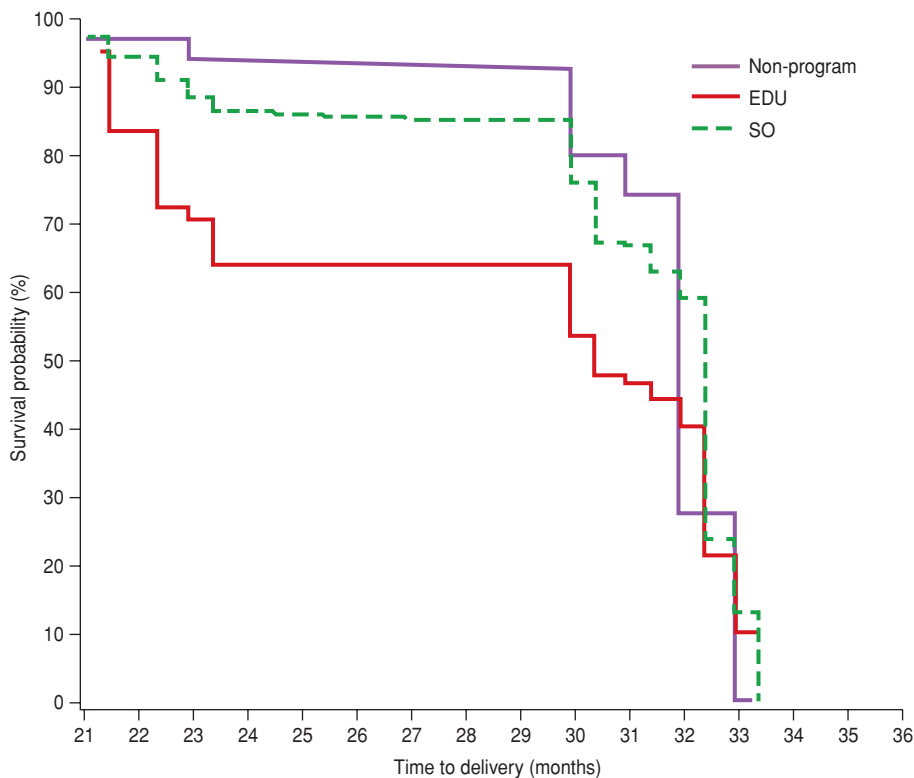
Type of participation	Crude OR	95% CI ^a	Adjusted OR ^b	95% CI	Crude HR	95% CI	Adjusted HR ^c	95% CI
Education component only	0.653	0.375–1.138	0.535	0.304–0.940	0.877	0.788–0.975	0.893	0.802–0.994
Education and soccer components	0.927	0.531–1.619	0.819	0.465–1.442	0.668	0.591–0.755	0.631	0.558–0.714

^a CI: confidence interval.

^b Adjusted for age at time of program participation and village of residence.

^c Adjusted for age at program participation, village of residence, and age/time interaction (age upon completion of program and number of days to giving birth).

FIGURE 1. Hazard ratio curves for giving birth (“delivery”)^a for nonparticipants (“Non-Program”), participants in the education component only (“EDU”), and participants in both the education and soccer components (“SO”) of a combined sex health education–sports program (“GenNext”) for adolescent girls, Haiti, 2006



^a Months to time of delivery from end of program (1 December 2006).

tion prevention program could be built. Improved health literacy and increased sense of agency are two important goals of the GenNext program. Equally important is providing today’s young women with the tools, skills, and support necessary to change societal and cultural beliefs that limit their educational and economic opportunities. This is especially true in countries with large populations of adolescent girls and few gender equity policies or practices. Structural issues and societal expectations must be changed to increase young women’s

equal access to education, health, and employment (12). A number of different factors, including poverty, gender inequality, and educational/economic opportunities, can affect the adolescent birth rate. Forced sex, transactional sex, and sexual coercion are experienced by many adolescents and may result in limited condom negotiation ability and sexual decision-making power, despite SRH education. Given these constraints, this report does not mean to suggest that one type of program can or should be used to address births among adolescent girls.

Reducing pregnancy and births among this age group requires a multifaceted and coordinated effort by many partners from different sectors, and any sustainable solution requires joint community–government buy-in and integration.

The prolonged effect of the GenNext program can be explained by its structure, which was community-driven from the start and sustained by strong youth groups led by CHWs and/or peer leaders. In the program evaluation sessions, many of the youth groups reported that while the youth group structure existed prior to the GenNext, the program’s soccer component increased youth group participation and catalyzed other activities such as soccer tournaments, continued health literacy education, and income-generating activities. For example, during the youth group meetings, girls learned how to make homemade ORS, a critical skill for mothers, particularly in rural areas where commercially made ORS was often scarce. The youth who learned this skill applied it during Haiti’s cholera epidemic and worked with CHWs to make the packets and distribute them to households in their communities. While all adolescent programs are not able to integrate the ORS component, it is a critical element for developing strong linkages between independent, vertical, adolescent girls’ programs and larger programs that provide participants with access to comprehensive health care.

Several critiques of sport-for-development programs suggest that the recent support they have garnered from international donors has led to a top-down approach in carrying out the interventions, resulting in critical discourse on whether or not “Northern” aid to the “South” is benevolent (35, 36). In addition, in settings where programs are not driven and supported by existing community health groups, as the GenNext program was, it is important to continu-

ally ensure that the perspectives of both the community and youth are an integral part of the programming and contribute in a meaningful way to future research and evaluation (37–40).

Strengths and limitations

One of this study's strengths was the comprehensive HIS that was used to track the data. Few community-based programs utilize a data-tracking system as advanced and comprehensive as the HIS used by HHF. The program has high data validity and is continually updated by data input staff. In addition, the researchers had a great deal of knowledge about the GenNext program; the HHF service area; the language, culture, and customs of southwestern Haiti; and the knowledge, attitudes, and practices (KAP) of adolescent girls. This program evaluation focused solely on adolescent girls in rural Haiti, a population that has largely been ignored in terms of both interventions and research. The program is unique within Haiti, and the few programs similar to it outside the country have not used birth rates as an indicator of program impact.

The limitations of the study included the fact that it documented birth rates rather than pregnancy rates. Pregnancy rates are difficult to ascertain in rural areas of Haiti due to the limited availability and use of pregnancy tests. It is also difficult to document pregnancy termination (through miscarriage, or intentional termination, which is illegal in Haiti). The second limitation was that girls' self-selection for participation in the soccer program component may have created bias.⁸

Recommended research

There are several ways this research could be expanded. First, because most (but not all) program participants were in school during the education program component, future research could consider the effects of 1) school enrollment and 2) grade for age levels (whether or not difference in age per school grade had an effect on days to giving birth).

Second, based on the results of the program evaluation interviews and fo-

⁸ Biased sampling can result from individuals selecting themselves into a group when the personal characteristics that led to the self-selection create abnormal conditions in the sample group.

cus group sessions, pregnancy termination is another important issue to address in rural Haiti. While statistics are difficult to obtain, because of the illegality of abortion, some of the program evaluation results indicated girls were using misoprostol⁹ purchased from local markets to terminate their pregnancies. Other evaluation results indicated pregnancy termination was being carried out by obtaining treatment from unlicensed medical doctors or traditional healers, or by drinking herbal teas. Other studies have shown that restrictive abortion regulations lead to increased unintended adolescent births (41). Further research should be conducted to investigate this issue. Another issue highlighted in the interviews and in program observations was the fact that some girls bind their stomachs to hide pregnancy. This behavior may have even been exacerbated by the soccer component of the program, based on reports that girls were doing it so that they could continue to play. This issue should be investigated further. Finally, future research should use a Youth Participatory Action Research (YPAR)¹⁰ approach to ensure that the youth themselves are the driving force behind youth programming, the investigation, and any youth-centered policy change (35–38).

Lessons learned

This study evaluation revealed that female SRH teachers, youth group leaders, and coaches were preferable to men, because of their ability to provide role models for adolescent girls. While placing women in these roles may be challenging in some settings, women should play prominent roles to whatever extent possible. Another lesson learned was the value of having nurse educators (versus peer educators¹¹) in programs such as this one, particularly in settings with limited access to healthcare for adolescents. Because the health sessions were taught in rural communities with limited access to health providers,

having nurse educators provided rare access to health professionals for the study participants, and there were several reported cases of a nurse educator diagnosing and treating STDs. Another lesson learned was the value of the program being part of a larger community health system—holistic care, in the case of GenNext—to allow for expansion beyond SRH education.

Conclusions

In the past five years, Haiti has experienced a devastating earthquake and multiple hurricanes that have destroyed homes, schools, and infrastructure and led to a sustained epidemic of cholera that has ravaged the population. These effects were magnified by the fragmentation of NGO service providers, the lack of integration of NGOs within the larger governmental system, the influx of mismanaged aid, and an unstable political environment. The lack of infrastructure in an already fragile health care system has further worsened the ability of women to seek SRH care (27). Providing girls and young women, from adolescence into adulthood, with education, positive community-building activities, and economic livelihoods, supports this vulnerable population attain the necessary skills, knowledge, and self-worth to make healthier life decisions, even in the face of extreme challenges. This research demonstrates a significant association between an SRH–soccer program and reduction in births among adolescent girls in rural Haiti. SRH education combined with sports can break down harmful gender stereotypes and promote a sense of agency, thus helping to prevent adverse reproductive health outcomes among adolescent girls.

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⁹ Synthetic prostaglandin E₁ used to induce labor, and abortions; prevent and treat stomach ulcers; and treat postpartum bleeding.

¹⁰ A praxis which provides young people with opportunities to study social problems affecting their lives and then determine actions to rectify these problems (39).

¹¹ Community members (usually volunteers) trained to promote health-enhancing change among their peers.

part of the GenNext program and share their knowledge of health and their love and passion for soccer with younger generations.

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Conflicts of interest. None.

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RESUMEN

Fútbol y educación en salud sexual: un enfoque prometedor para reducir los partos en adolescentes en Haití

Objetivo. Explorar la repercusión de un programa innovador e integrador de salud sexual y reproductiva femenina y fútbol llevado a cabo en una zona rural de Haití, mediante la medición de la tasa de partos entre las participantes del programa, de 15 a 19 años de edad, y entre sus compañeras no participantes.

Métodos. Se utilizó un estudio retrospectivo de cohortes, que usaba los datos del periodo 2006–2009 del sistema de seguimiento de datos computadorizados de la Fundación Haitiana de Salud (HHF), una organización no gubernamental con sede en los Estados Unidos que presta servicio a las poblaciones urbanas y rurales de Haití, para evaluar los partos en las adolescentes de 15 a 19 años de edad que participaron en el programa GenNext de la HHF. Este programa es una combinación de educación y fútbol para jóvenes y se basa en las clases de salud sexual y reproductiva que el personal de enfermería de la HHF y los trabajadores comunitarios han impartido en Haití para madres, padres y jóvenes; los tamizajes de salud centrados en las adolescentes; y una liga de fútbol de verano solo para mujeres durante dicho periodo ($n = 4\ 251$). Se llevaron a cabo análisis bivariado y de regresión logística múltiple para evaluar las diferencias en las tasas de partos entre las participantes del programa según su nivel de participación (sólo el componente de salud sexual y reproductiva [“EDU”] frente a ambos componentes, salud sexual y reproductiva, y fútbol [“FU”]) en comparación con las compañeras de su municipio que no participaron. Se calcularon las razones de riesgo (RR) de las tasas de partos mediante análisis de regresión de Cox de los datos de maternidad de los tres grupos.

Resultados. En el análisis de regresión logística múltiple, sólo las adolescentes del grupo “EDU” tuvieron significativamente menos partos que las no participantes tras ajustar para los factores de confusión (razón de posibilidades = 0,535; intervalo de confianza [IC] 95% = 0,304–0,940). El análisis de regresión de Cox demostró que las del grupo EDU (RR = 0,893; IC 95% = 0,802–0,994), y en un mayor grado las del grupo FU (RR = 0,631; IC 95% = 0,558–0,714), estaban significativamente protegidas contra la maternidad en edades comprendidas entre los 15 y los 19 años.

Conclusiones. El programa GenNext de la HHF demuestra la eficacia de utilizar al personal de enfermería como educadores, la movilización comunitaria, y la participación de las jóvenes en actividades educativas y deportivas, y en grupos juveniles estructurados, para promover y mantener la salud de las adolescentes y las mujeres jóvenes.

Palabras clave

Salud de la mujer; salud del adolescente; fútbol; Haití; América Latina; región del Caribe.