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Elizabeth Miller, MD, PhD,¹ Madhumita Das, PhD,²
Daniel J. Tancredi, PhD,³ Heather L. McCauley, ScD,
ScM,¹ Maria Catrina D. Virata, MPH, CPH,¹
Jasmine Nettiksimmons, PhD,⁴ Brian O'Connor, MS,⁵
Sancheeta Ghosh, PhD,² and Ravi Verma, PhD²

Abstract

Gender-based violence, which includes sexual and intimate partner violence against women, is prevalent worldwide, prompting calls for primary prevention programs which engage men and boys in changing social norms that condone violence against women. Bystander intervention efforts which encourage males to say something to stop peers from enacting disrespectful and abusive behaviors toward females are a promising strategy for promoting non-violent, gender-equitable attitudes and behaviors. An evaluation of “Parivartan”—a U.S. program called “Coaching Boys Into Men” adapted for urban India cricket teams—was conducted in Mumbai, India. Baseline and 12 month follow-up surveys were administered to 309 male

¹Division of Adolescent Medicine, Department of Pediatrics, University of Pittsburgh School of Medicine, PA, USA

²International Center for Research on Women (ICRW), New Delhi, India

³University of California Davis School of Medicine and Center for Healthcare Policy and Research, Sacramento, CA, USA

⁴University of California San Francisco, CA, USA

⁵Futures Without Violence, The Presidio, San Francisco, CA, USA

Corresponding Author:

Elizabeth Miller, Division of Adolescent Medicine, Children’s Hospital of Pittsburgh/University of Pittsburgh Medical Center, 3420 Fifth Ave., Pittsburgh, PA 15213, USA.

Email: elizabeth.miller@chp.edu

cricket athletes aged 10 to 16 years in 46 urban middle schools in Mumbai, India (27 intervention, 19 control). Athletes whose coaches were trained in the program demonstrated greater improvements in gender-equitable attitudes compared to athletes whose coaches provided standard coaching only. Marginally significant improvements were seen in reduction of negative bystander behavior. Violence prevention programs which utilize coaches as positive messengers for respect and non-violence may be a useful addition to global prevention efforts to reduce violence against women.

Keywords

gender-based violence, bystander interventions, athletes and coaches, prevention program

Gender-based violence (GBV), which includes sexual harassment, sexual assault, and intimate partner violence, is experienced by one in three women and girls worldwide (Garcia-Moreno, Jansen, Ellsberg, Heise, & Watts, 2006; Krug, Mercy, Dahlberg, & Zwi, 2002; Watts & Zimmerman, 2002), prompting calls for primary prevention programs targeting youth (Centers for Disease Control and Prevention, 2011; Krug et al., 2002; World Health Organization, 2011). Adolescent perpetration of GBV is associated with multiple individual and contextual-level factors, including exposure to adverse childhood experiences and limited development of conflict resolution and relationship skills (Foshee, Linder, MacDougall, & Bangdiwala, 2001; Miller et al., 2011). Harmful notions of masculinity and male aggression are additional modifiable factors that are often expected and normalized in relation to violence against women (Hines, 2007). A recent population-based study across several South Asian countries found a range of 28% to 51% of adolescent males aged 15 to 19 years holding attitudes supportive of wife beating (Dalal, Lee, & Gifford, 2012). Thus, prevention of male-perpetrated violence against women requires attention to changing social norms—that is, increasing gender-equitable attitudes and reducing acceptance of violence against women (Berkowitz, 2002; Gidycz, Orchowski, & Berkowitz, 2011; Katz, Heisterkamp, & Fleming, 2011; Langhinrichsen-Rohling, Foubert, Brasfield, Hill, & Shelley-Tremblay, 2011; McMahon, Postmus, & Koenick, 2011).

Gender equity refers to attitudes and behaviors which promote equality and respect for women, incorporate shared responsibilities around household and child care duties, support women's reproductive decision making, and oppose violence against women (Pulerwitz & Barker, 2008). Holding more equitable gender attitudes is associated with lower prevalence of self-reported

GBV perpetration (Berkowitz, 2002; Santana, Raj, Decker, La Marche, & Silverman, 2006). A growing body of programs encourages men to appreciate the importance of equity for women and to recognize the impact that gender inequity has on their own lives as a strategy to reduce GBV (Berkowitz, 2002; Gidycz et al., 2011; Langhinrichsen-Rohling et al., 2011; McMahon et al., 2011; Santana et al., 2006). A review of 58 such programs suggests that men and boys can and do change their behaviors and attitudes regarding reproductive and sexual behavior, interaction with partners and their children, and their use of violence against women (Barker, Ricardo, & Nascimento, 2007). Thus, working with men and boys to adopt gender-equitable, nonviolent attitudes is increasingly recognized by major global health organizations as one public health strategy to reduce violence against women and girls (Barker et al., 2007; International Center for Research on Women & Instituto Promundo, 2007; United Nations Population Fund & Promundo, 2010).

“Coaching Boys Into Men” (CBIM) is a program designed in the United States targeting middle and high school-age adolescent males and their coaches. This program trains coaches to be messengers to young athletes about standing up against GBV and promoting gender equity through a bystander intervention approach. Positive bystander intervention involves educating youth to speak up or act when witnessing harmful behaviors among their peers, which has been hypothesized to shift social norms around violence and reduce the incidence of violence perpetration (Banyard, Moynihan, & Plante, 2007; Foubert & Newberry, 2006; Gidycz et al., 2011; Langhinrichsen-Rohling et al., 2011; McMahon et al., 2011; Moynihan, Banyard, Arnold, Eckstein, & Stapleton, 2011). By engaging coaches as positive role models, training them to deliver consistent messages about respecting women, and conveying the importance of stopping GBV, the program encourages youth to interrupt disrespectful, abusive behaviors they witness among their peers. Athletics are a particularly salient setting for violence prevention as male athletes in aggressive sports report higher rates of abuse perpetration, hold more gender-inequitable attitudes than non-athlete peers, and are often viewed as leaders by their peers (Boeringer, 1999; Moynihan et al., 2011). In the U.S. high school setting, the CBIM program has been found to increase male athlete intentions to intervene, more positive bystander behaviors, and less abuse perpetration (Miller et al., 2012; Miller et al., 2013).

Using lessons from the U.S.-based implementation (Miller et al., 2012), an Indian adaptation of CBIM was developed. Cricket was chosen as it is the most popular sport in South Asia, and is distinctly male, with few opportunities for females to participate. Cricket offers the opportunity to explore masculinity in sports, the extent to which coaches and athletes support

gender-inequitable attitudes, and how cricket coaching might be a vehicle for challenging and changing social norms related to masculinity in India. Mumbai, India, was selected as the site for this pilot because unlike other urban areas in India, Mumbai has a student sports association with an existing network of coaches, allowing for easier access to schools and coaches as well as more school-based cricket teams with infrastructure to facilitate program implementation.

Extensive formative research using in-depth interviews with coaches and focus groups with cricket athletes aged 12 to 14 years was conducted to ensure cultural relevance, feasibility, and acceptability of this program (Das, Ghosh, Miller, O'Connor, & Verma, 2012). Interviews with coaches in Mumbai highlighted their role as educators of boys, but many felt that sensitive issues such as sexual harassment were for parents or schools to address, not coaches. While most coaches recognized that inequity exists between males and females, they also revealed attitudes accepting of such gender discrimination. Similarly, in the focus groups, athletes shared how common sexual harassment ("eve teasing") is among peers with almost no comments from coaches or other adults about such behavior. Thus, adaptation of the U.S. CBIM program in India (renamed and redesigned as "Parivartan" which means transformation) focused on more intensive training for coaches on gender equity in general, articulating for coaches patriarchal gender norms in India which condone and normalize behaviors that are disrespectful and harmful toward women. During a 3-day workshop, led by a male instructor with expertise in engaging men to reduce GBV and encourage positive masculinity, the coaches received instruction on gender socialization, skills to encourage bystander intervention, and how to introduce the Parivartan program to their athletes. Following this 3-day introductory workshop, coaches participated in biweekly workshops to learn how to deliver the program (9 additional days over a 4-month period), in marked contrast to the one-time 60-min training offered to coaches using CBIM in the United States. Twelve cards provide scripted talking points for coaches to discuss specific messages such as personal responsibility, respectful language, sexual harassment, controlling aggression, bragging about sexual reputation, and positive bystander intervention. The actual cards used by the Mumbai cricket coaches remained similar in content to the original U.S. training cards created for high school-age male athletes, based on feedback from the coaches and athletes. In the workshops, coaches were encouraged to practice delivering these messages with their own examples and stories to ensure relevance for their athletes.

Intervention components delivered by the coaches are grounded in three theory-based approaches: (a) "positive deviant" role modeling (i.e., speaking out and standing up when witnessing disrespectful and abusive behaviors

among peers), (b) gender transformation (i.e., focusing on positive, nonviolent masculinity and gender equity), and (c) creating a safe, supportive environment that encourages positive behaviors among youth and assists those exposed to violence (see Figure 1).

The first approach, modeling “positive deviance,” is an asset-based approach that identifies individuals or groups whose uncommon behaviors and strategies enable them to find better solutions to problems than their peers, while having access to the same resources and facing similar or worse challenges (Verma et al., 2006). By observing role models, that is, coaches, who intervene when witnessing inappropriate behavior, athletes develop skills and confidence to intervene themselves, and are encouraged by their coaches to be bold about speaking out against violence. Rooted in Social Cognitive Theory (SCT; Bandura, 1989), the observational learning component provides direct training to improve athletes’ self-efficacy to engage in bystander behavior themselves and creates a social climate that promotes such intervention. SCT posits interactions across environmental and individual levels (Baranowski, Perry, & Parcel, 2002) with these levels interacting synergistically (Bandura, 2004; Story, Neumark-Sztainer, & French, 2002) such that the “positive deviance” encouraged in Parivartan is expected to lead to attitude and behavior change among teammates in addition to changes among athletes themselves.

The second intervention component—gender transformation—focuses on promotion of gender-equitable attitudes through presenting messages to adolescent males about challenging masculinity norms that are denigrating toward women. Gender transformative approaches appear to lead to greater change in non-violent and prosocial attitudes and behaviors including reducing GBV (Barker et al., 2007). As gender norms and attitudes are socially reinforced (Christine, 2003; Reed, Silverman, Raj, Decker, & Miller, 2011) and male role models (such as coaches) wield particular influence (Reed et al., 2011; Reed et al., 2008), addressing gender norms within masculine sports such as cricket may be a particularly effective means of shifting young males toward more positive gender-equitable attitudes (Barker et al., 2007).

Finally, the third component of the conceptual framework involves creating a safe and supportive environment that encourages non-violent behaviors and assists youth exposed to violence. The role positive social supports play in youth development is well-acknowledged in educational and health literature (Hale, Hannum, & Espelage, 2005; Wight, Botticello, & Aneshensel, 2006; Wright, 2006). Family and peer support are protective factors that buffer negative effects of violence exposure on behaviors and academic performance (Howard, Budge, & McKay, 2010) and that promote well-being in the context of environmental stressors (Dubois, Felner, Mearns, & Krier, 1994).

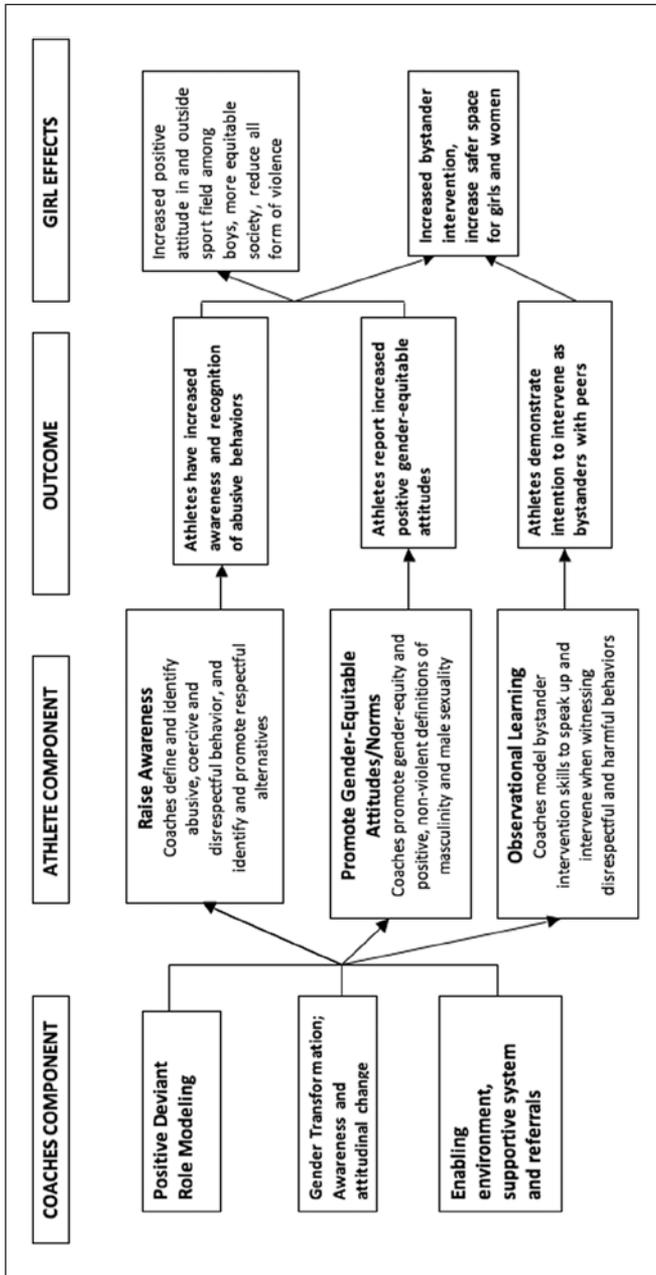


Figure 1. Conceptual model of Parivartan program.

Social supports may also alter learned aggressive behaviors and play a protective role for adolescents against violence perpetration in the context of a violent environment (Brookmeyer, Henrich, Cohen, & Shahar, 2011). In the case of athletics, peers and coaches who do not condone violence and actively intervene to stop such behaviors may create a safe, non-violent environment for young athletes.

These theoretical frameworks translate into specific intervention components delivered by coaches to their athletes—defining what constitutes abusive behavior; promoting gender-equitable, non-violent attitudes; and modeling skills to speak up and intervene when witnessing harmful and disrespectful behaviors (Figure 1). These intervention components are hypothesized to impact athletes' recognition of abusive behaviors, gender-equitable attitudes, and intentions to intervene as a positive bystander, which in turn are hypothesized to increase actual bystander behaviors and reduce violence perpetration. The goals of Parivartan are to positively affect the lives of youth in India by improving adolescent males' gender attitudes and increasing positive bystander behaviors leading to an increase in safer spaces for women and girls.

This article reports on a pilot study to evaluate program effects on middle school-aged cricket athletes in schools in Mumbai. The primary outcomes of interest were recognition of abusive behaviors, gender-equitable attitudes, and intentions to intervene. Secondary outcomes explored were bystander intervention behaviors and abuse perpetration. Given the immense popularity of cricket in India, the integration of violence prevention and gender transformation into adolescent males' experiences with cricket could create significant social change.

Method

Participants

The Mumbai School Sports Association, a non-governmental organization that supports school-based athletics in Mumbai, India, including training for coaches, shared spaces for practicing, as well as tournament organization, assisted in recruitment of schools. From an initial list of 115 schools in the region where cricket coaching was taking place as part of school activities, 60 high schools (a mixture of public, non-governmental, charitable, and trust-based schools and private missionary schools) were identified that were active members of this Sports Association, meaning the coaches attended Association meetings and participated in Association cricket tournaments. Leaders of the Sports Association approached each of these schools to invite

them to participate in this pilot project. Forty-six schools agreed to participate. Cricket coaches affiliated with each of these schools were approached to participate in the study, all of whom agreed to participate. Schools that elected not to participate were both private and public; the primary reason given for non-participation was coaches not having enough time. Twenty-seven schools, located in western and southern Mumbai with overlapping practice fields and some shared coaching, were selected to receive the program. Cricket coaches from those schools were invited to attend the 3-day workshop to introduce them to Parivartan. Nineteen schools, located in the northern and eastern Mumbai (geographically distinct from the intervention schools with no overlapping practice fields thus less possibility of contamination), served as “wait list” comparison schools. The intervention schools included more Muslim neighborhoods, but otherwise did not differ in distribution of private or public schools compared with controls.

Of the 741 male athletes approached to participate, 89% ($n = 663$) returned parent consent forms and completed a baseline survey. Forty-seven percent of athletes completed a follow-up survey 12 months later ($n = 309$). Reasons for athletes’ loss to follow-up (reported by participating schools) were graduation, changing schools, opting out from cricket, and changing cricket teams. Notably, cricket is a year-round sport in India, even in schools, without a clear beginning or end of the sports season as in the United States. This meant each team’s composition was fluid. For both intervention and control schools, the baseline survey included athletes who had already been on the team for a while as well as new athletes; throughout the year, new students joined the team while others left the team for various reasons noted above. Unfortunately, this pilot evaluation did not have sufficient resources to track students lost to follow-up.

Intervention Implementation

Baseline surveys were completed prior to intervention coaches attending the first 3-day workshop on how to implement the Parivartan program. After completion of the full Parivartan training as described above, coaches were asked to discuss the Parivartan cards with their athletes over a 4-month period (about one card per week). Coaches reported spending about 45 to 60 minutes discussing each card on average, longer than CBIM implementation in the United States where coaches spent about 10 to 15 minutes per card. Follow-up surveys were conducted 12 months after baseline. Twenty of the 25 trained coaches (80%) completed all cards, documented through observations of program delivery and coaches’ reports. Nearly half (45%) the

athletes reported being exposed to 8 to 12 cards, 23% to 5 to 7 cards, and 32% to 4 or fewer cards.

Measures

Attitudes disapproving of violence against females. A seven-item scale developed for a gender socialization program among middle school students in India (Achyut, Bhatla, Khandekar, Maitra, & Verma, 2011) was used to assess the extent to which adolescent males condone or disapprove of violence against females. "In what situations do girls deserve to be beaten?" with items including "when she had an affair with a boy" and "when she doesn't help in the household chores," using a 5-point Likert-like scale ranging from "agree" to "disagree" (Cronbach's α for this sample = .83). Attitudes disapproving of violence against females were modeled as a mean of responses to seven items.

Gender-equitable attitudes. This 21-item scale includes questions modified from a Gender-Equitable Norms Scale (Barker et al., 2007; Pulerwitz & Barker, 2008) with items added from the Gender-Equitable Men (GEM) Scale program in India (Achyut et al., 2011) and the United States CBIM program (Miller et al., 2012) for greater relevance to adolescents. Fifteen of the items are statements about gender roles and characteristics such as "girls like to be teased by boys" and "boys lose respect if they talk about their problems." The remaining seven items ask about whether a boy is justified in enacting certain behaviors toward a girlfriend, including "telling her what kind of dress she can or cannot wear" and "trying to convince her to have sex." Responses range from "agree" to "disagree" on a 5-point scale (Cronbach's α for this sample = .70), modeled as a mean of responses to 21 items.

Intentions to intervene when witnessing abusive behaviors. For each item representing abusive behaviors (e.g., making sexual jokes about a girl) identified during the formative research, participants report on a 6-point scale how likely they would be to say something to stop the behavior from "This is fun, I will join them" to "I believe that this should never happen and I will work to stop it whether I see it or not." (Cronbach's α for this sample = .86). Intentions to intervene were modeled as a mean of seven items, similar to approach used for the U.S. CBIM study (Miller et al., 2012).

Positive and negative bystander intervention behaviors. Items were modified from the U.S. CBIM study based on common abusive behaviors identified by athletes during the formative research and previous gender norms program

evaluations in urban India conducted by the India team (Achyut et al., 2011; Das et al., 2012; Miller et al., 2012). For each of a list of eight abusive behaviors they may have witnessed among peers or friends in the past 3 months, participants reported how they responded to the behavior (if witnessed) by selecting all applicable responses from a list of two negative behaviors (“This is fun, I joined them” and “This is normal, it happens all the time, I did nothing”) and four positive behaviors (“I talked to the person afterwards,” “I talked to the person involved about why it’s wrong and brought it up to other people,” “I felt really bad and intervened to stop the act in the moment,” and “I believe this should never happen and work to stop it whether I see it or not.”). For each abusive behavior, separate binary indicators (for any positive and for any negative intervening behavior) were created. If an abusive behavior was not witnessed, both indicators were coded zero. The eight positive and eight negative indicators were summarized separately to create the positive and negative bystander intervention behavior scores.

Sexual violence perpetration. Athletes were asked about perpetrating any of six sexually abusive behaviors toward a female (not a family member) in the past 3 months (Achyut et al., 2011; Das et al., 2012) including forcing a girl to kiss when she did not want to and forcing a girl to have sex when she did not want to. Because affirmative responses to these questions were rare, a single binary indicator was created for any sexual violence perpetration.

Overall abuse perpetration. In addition, athletes reported on any physical or verbal/emotional abuse perpetrated against others at home, in the community, and at school. A sum of the affirmative answers to these questions over all locations was created, resulting in a continuous abuse perpetration score with a possible range of 0 to 20 (Cronbach’s $\alpha = .82$).

Analyses

Preliminary descriptive and bivariate analyses using chi-square and *t* tests were conducted to compare intervention with comparison school athletes at baseline as well as to compare athletes lost to follow-up to those athletes with complete data. All available data at follow-up were analyzed according to school assignment (i.e., as in an “intent to treat” analysis). Mean change scores between intervention and comparison athletes were tested with linear mixed-effects regression models. Random intercepts for school were included to account for between-school differences, and age group at baseline and religion were included as fixed effects (Van Breukelen, 2006). Empirical (“sandwich”) variance estimates that are robust to heteroskedasticity were

used to estimate confidence intervals for regression coefficients for models that included random effects. Because of a large number of nonresponses to questions about sexual violence in the preintervention period in the intervention arm (likely related to a faulty skip sequence), a follow-up-only analysis was performed to test for differences between arms for this outcome. Analysis was performed using SPSS version 18.0 and SAS version 9.3.

Results

The male school-age cricket athletes who participated in this study were aged 10 to 16 years (Table 1). The comparison athletes were more likely to be older and predominantly Hindu, reflecting differences in the neighborhoods and schools participating in the intervention arm compared with controls. Type of residence served as a proxy for socioeconomic status—Pucca refers to single residences made of higher quality materials, indicating higher socioeconomic status, while Kachha refers to apartments or slum dwellings often made of mud or straw, indicating lower socioeconomic status. The two groups did not differ by type of residence nor whether their mother was employed outside the home (an indicator for gender traditionality). Given these differences between arms, age and religion were included in models to assess intervention effects on outcomes of interest.

Baseline Prevalence and Differences in Outcomes of Interest

Intervention athletes demonstrated slightly less equitable gender attitudes overall and less intentions to intervene compared to comparison athletes at baseline. Comparison and intervention athletes did not differ on bystander behaviors nor abuse perpetration (whether at home, school, or community in general or toward females specifically) at baseline (Table 2).

Attrition Analyses

A total of 354 athletes were lost to follow-up (54%) with statistically equivalent ($p = .35$) proportions of athletes lost to follow-up in the intervention schools (55%) and in the comparison schools (51%). Younger (10-12) and older (15-16) athletes were lost to follow-up in the intervention group compared to the comparison athletes. Those lost to follow-up were more likely to disapprove of abusive behaviors than those athletes with complete data. No differences were found between those lost to follow-up and those with complete data regarding reports of gender-equitable attitudes and perpetration of violence.

Table 1. Sample Characteristics.

	Baseline (% n)	
	Intervention (n = 168)	Comparison (n = 141)
Age		
10 to 12 years	42.9 (72)	27.0 (38)
13 to 14 years	52.0 (89)	65.3 (92)
15 to 16 years	4.2 (7)	7.8 (11)
	$\chi^2 = 9.16, p = .01$	
Type of house ^a		
Pucca	66.7 (112)	63.1 (89)
Kachha	33.3 (56)	36.9 (52)
	$\chi^2 = 0.42, p = .52$	
Mother working outside home		
Yes	34.5 (58)	34.8 (49)
No	65.5 (110)	65.3 (92)
	$\chi^2 = 0.00, p = .97$	
Religion		
Hindu	75.0 (126)	95.0 (134)
Muslim	20.2 (34)	2.8 (4)
Others	4.8 (8)	2.1 (3)
	$\chi^2 = 24.3, p < .001$	
Perpetration of physical or verbal violence at home, school, or in the community	85.7 (144)	84.4 (119)
	$\chi^2 = 0.10, p = .75$	
Perpetration of sexual violence against girls	7.1 (2 of 28)	10.6 (15 of 141)
	Exact $p = .74$	

^aPucca refers to single residence homes, indicating higher socioeconomic status; Kachha refers to apartments or slum dwellings, indicating lower socioeconomic status.

Changes in Attitudes

There were statistically significant increases in gender-equitable attitudes among athletes receiving the intervention compared to athletes from comparison schools. There were no differences in changes in attitudes disapproving of violence against females.

Changes in Bystander Intervention and Abuse Perpetration

Fewer negative intervention behaviors (i.e., laughing and going along with peers' abusive behaviors) were reported by intervention athletes at follow-up

Table 2. Comparison of Outcomes Between Intervention and Comparison Athletes.

	Baseline <i>M</i> (<i>SD</i>)		Between-Group Comparison on Baseline Scores (Adjusted)		Follow-Up <i>M</i> (<i>SD</i>)		Between-Group Comparison on Change Scores (Adjusted)
	Intervention	Comparison			Intervention	Comparison	
Attitudes disapproving of violence against women	3.27 (1.09)	3.17 (1.12)	$p = .57$		3.29 (1.03)	3.15 (1.09)	0.04 95% CI = [-0.31, 0.39], $p = .82$
Gender attitudes	3.18 (0.58)	3.36 (0.54)	$p = .03$		3.42 (0.60)	3.39 (0.59)	0.28 95% CI = [0.12, 0.43], $p = .001$
Intentions to intervene	4.64 (1.30)	4.81 (1.06)	$p = .17$		4.84 (1.33)	4.71 (1.08)	0.34 95% CI = [-0.08, 0.76], $p = .11$
Bystander intervention: Positive	1.27 (2.0)	1.40 (1.89)	$p = .50$		1.10 (1.64)	1.21 (1.87)	0.05 95% CI = [-0.52, 0.62], $p = .86$
Bystander intervention: Negative	0.52 (1.29)	0.40 (1.08)	$p = .24$		0.38 (0.80)	0.52 (1.03)	-0.32 95% CI = [-0.67, 0.03], $p = .07$
Violence scale (home/school community)	4.98 (3.90)	4.77 (3.96)	$p = .65$		3.74 (3.72)	4.45 (4.37)	-0.60 95% CI = [-2.06, 0.85], $p = .42$

Note. Adjusted mean differences estimated via restricted maximum likelihood estimation of mixed-effects linear regression models that included random effects for school (except where noted) and fixed effects to statistically adjust for baseline age group and religion. Confidence intervals are based on robust standard error estimates when models include random effects and on restricted maximum likelihood estimates when models did not.

compared with comparison athletes, but this difference was only marginally significant ($p = .07$). No differences were noted in positive bystander intervention behaviors nor in self-reported abuse perpetration at home/in school/in community. There were no significant differences in sexual abuse perpetration: 5.4% ($n = 9$) in intervention group, 5.7% ($n = 8$) in control group; adjusted p value = .92.

Discussion

This evaluation of an athletics-focused GBV prevention program demonstrates that, with training, cricket coaches in urban India are able to deliver messages about gender equity and bystander intervention to their male athletes. Evaluation results suggest some promising changes in gender attitudes and behaviors among young male cricket athletes. Compared with athletes in the control schools, athletes exposed to the program reported shifts in attitudes toward greater gender equity. Athletes in the comparison group also reported an increase in negative intervention behaviors at follow-up compared with intervention athletes, which although not statistically significant, is noteworthy as in the absence of the Parivartan program there may be deterioration in behaviors. This pattern of worsening behaviors among control athletes has been noted in evaluations of the U.S.-based program as well (Miller et al., 2012; Miller et al., 2013).

These middle school-age male athletes in urban India reported high levels of abusive behaviors in their homes, schools, and communities (overall prevalence of over 80% in both arms). This is in contrast to their reported sexual violence perpetration toward females (7% of intervention and 11% of the comparison group). This suggests the timing of introducing Parivartan to this age group may be developmentally on target, prior to initiation of sexual violence perpetration, which increases in later adolescent years.

The Parivartan program was adapted from the U.S.-based CBIM program with significant input from cricket coaches in India, school administrators, and athletes themselves. The most significant adaptation was more intensive training of coaches on the concepts of gender equity and how to present the material to their athletes involving 12 full days of training, in marked contrast to the U.S. program that involves a 1-hr introduction for coaches to the program. While the content of the Parivartan program (specifically the training cards) translated without difficulty in terms of readability and understandability for coaches and athletes (Das et al., 2012), the implementation of the program required significantly more commitment from coaches and schools compared with the United States. This raises questions about how best to implement this program in India, especially in rural settings where literacy is

likely to be a greater challenge. Next steps for the Parivartan program include working with coaches to determine how best to implement this program across schools in Mumbai, how to motivate schools and coaches to be interested in participating, how to extend the program beyond the middle school years (in the more highly competitive high school-level cricket teams), and refining of tools and measures. A rigorous evaluation using cluster-randomization and longitudinal design as well as more intensive monitoring of fidelity to intervention are needed to assess program effects.

These evaluation findings should be interpreted in light of several limitations. First, with a quasi-experimental design, selection bias is a concern. The 60 schools that were initially approached were all affiliated with the Mumbai Student Sports Association, thus the study may have selected for coaches who were more amenable to this type of educational program. While the intervention and comparison athletes appear to be relatively similar across most characteristics and outcomes of interest, the problem of unmeasured differences between the two arms remains, including neighborhood characteristics. Second, the evaluation lost a large number of athletes to follow-up due to substantial, unanticipated turn-over of athletes on the cricket teams and limited resources for finding athletes who had left teams. The attrition analyses do not indicate large differences between students lost to follow-up and those with complete data, but likelihood of unmeasured differences between the groups and selection biases are notable threats to validity. Third, related to attrition and potential for confounding arising from the study design, the final sample size may have been too small to reliably detect smaller but meaningful differences in intervention versus comparison athletes on key outcomes of interest. Fourth, while the investigative team tried to observe a number of the discussions led by coaches, monitoring of intervention fidelity was limited. Over three quarters of coaches reported completing all 12 cards, but only half of the athletes reported discussing 8 or more cards. The evaluation analyses used an intent-to-treat approach with all available data, thus the overall findings of changes in gender attitudes and negative bystander behaviors are encouraging. Next steps include assessing how intervention intensity may influence intervention effects as well as identifying strategies to ensure that athletes receive the full program as intended. Finally, our ability to test pre-post changes in sexual violence perpetration was limited by a large number of nonresponses to these items in the baseline phase of the study.

These limitations notwithstanding, as a pilot study, these findings suggest the potential value of Parivartan. A large cluster randomized trial (CRT) would be desirable to further explore the value of this program in India. The CRT conducted in the United States found significant increases in intentions

to intervene and positive bystander behaviors and reductions in abuse perpetration between intervention and comparison groups and did not experience high attrition rates at follow-up (Miller et al., 2012; Miller et al., 2013). The Parivartan program appears to be targeting an appropriate age group for primary prevention of violence against women given the low prevalence of sexual violence perpetration reported among these adolescent males; a longitudinal evaluation is needed to assess longer-term program effects on sexual violence reduction. The program appears to have some promising impact on young athletes' gender-equitable attitudes, and what might be a protective effect, preventing further decline toward more negative behaviors (i.e., behaviors that condone disrespectful and harmful behaviors among peers). This program may serve as a useful adjunct to school and community-based GBV prevention efforts.

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Author Biographies

Elizabeth Miller is chief of adolescent medicine and associate professor of pediatrics at Children's Hospital of Pittsburgh, the University of Pittsburgh Medical Center. Trained in medical anthropology as well as Internal Medicine and Pediatrics, her research has included examination of sex trafficking among adolescents in Asia, teen dating abuse, and reproductive health, with a focus on underserved youth populations including pregnant and parenting teens and foster, homeless, and gang-affiliated youth. Her research focuses on the impact of gender-based violence on young women's health. She conducts research on brief clinical interventions to reduce partner violence and unintended pregnancy, funded by the National Institute of Child Health and Human Development and the National Institute of Justice. In addition, she is conducting a study of a sexual violence prevention program titled "Coaching Boys Into Men" (CBIM) which involves training coaches to talk to their young male athletes about stopping violence against women, funded by the Centers for Disease

Control and Prevention. She is involved in projects to reduce gender-based violence and improve adolescent and young adult women's health in India and Japan.

Madhumita Das works with the International Center for Research on Women as a senior technical specialist with more than 12 years of experience in academic research and communicating results to policy makers. She has done her PhD as well as master of population studies, in demography, from International Institute for Population Sciences, Mumbai, India. Her expertise includes providing intensive technical support in processing and management of large-scale data as well as intensive qualitative surveys, working on reproductive health of women, gender studies with a special focus on involving men and boys, gender-based violence and HIV/AIDS. Along with her research skills, she has strong program management skills to initiate and implement health and social programs.

Daniel J. Tancredi is a biostatistician and assistant professor in the Department of Pediatrics and a member of the Center for Healthcare Policy and Research at the University of California, Davis. He has expertise in statistical methods for the design and analysis of experimental trials of behavioral interventions and observational studies and more than 20 years experience heavily involved in collaborative medical and survey research at UC Davis and at Rush University in Chicago. He holds a bachelor's degree in behavioral sciences from the University of Chicago and a PhD in mathematical statistics from the University of Illinois at Chicago.

Heather L. McCauley is a postdoctoral fellow in the Division of Adolescent Medicine at Children's Hospital of Pittsburgh of the University of Pittsburgh Medical Center. She holds a ScD in Social Epidemiology and a ScM in Global Health from Harvard University. Her research focuses on the health impacts of gender-based violence against women and girls. She has spent much of the last 5 years as part of a team developing and testing violence prevention interventions for pregnant women in urban slums in Mumbai, India, and measuring the sexual and reproductive health impacts of sex trafficking in South Asia. She was also the data analyst for the evaluation of the U.S.-based Coaching "Boys Into Men program."

Maria Catrina D. Virata completed her master's in public health at University of California Davis. Currently, she is clinical research coordinator of Adolescent Medicine at Children's Hospital of Pittsburgh, the University of Pittsburgh Medical Center. She has been the project manager of the CBIM research study and worked closely with athletes and coaches in 16 public high schools in Sacramento, CA. She is involved in development of CBIM for middle schools and the CBIM national program evaluation. As a liaison to the Community PARTners Core of the Clinical Translational Science Institute at the University of Pittsburgh, she also works to increase involvement of community members in community-academic partnerships.

Jasmine Nettiksimmons is an epidemiologist and biostatistician who holds degrees from Bryn Mawr, the University of Montana and the University of California, Davis. At UC Davis, she provided statistical support to a variety of studies, including

intervention and health services research in pediatrics. As a post-doctoral fellow at the University of California San Francisco, her current research focuses on the biological and genetic correlates of cognitive aging.

Brian O'Connor holds a master's from Columbia University and is a member of the National Association of Black Journalists. He is the director of Public Education Campaigns and Programs for Futures Without Violence. In this role, he crafts national and international violence prevention public awareness and action campaigns for the organization, most of which focus on reaching men, parents, coaches, teachers, military families, and teens. To date, his efforts have enabled local adaptations of these programs in countless communities around the world. In particular, his work engaging men and boys to help end violence against women was instrumental in the development of the international CBIM initiative in partnership with UNICEF in 2006 and continues today.

Sancheeta Ghosh is currently working with the International Center for Research on Women as a research associate. She has more than 5 years of experience in academic and programmatic research. She has submitted her PhD dissertation thesis in Development Studies under ICSSR Fellowship from Institute for Social and Economic Change (ISEC) Bangalore and has a masters in Population Sciences from IIPS. Her area of expertise includes quantitative and qualitative research in reproductive health, maternal health, gender and development, and program management.

Ravi Verma, Regional Director of ICRW Asia Regional Office, has more than 25 years of programmatic research experience in the area of reproductive health, gender mainstreaming, and HIV/AIDS in India and in countries in Asia. He has a PhD in social sciences, Indian Institute of Technology, Mumbai, India, and master of arts, psychology, University of Allahabad, Allahabad, India. More recently, he has worked extensively on promoting gender equity working with men and boys. The tools developed in this program were taken up by the Indian National AIDS prevention programs, and public school systems in three major Indian states are scaling up the program in their schools. He has been instrumental in creating programs like "GEMS" which is with young schoolchildren, "IMAGES" with men aged 18 to 59 years, and CBIM where young men and boys in the area of sports are engaged in stopping violence against women by spreading awareness about gender equity.