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Evaluation of a male engagement intervention to transform gender norms and improve family planning and HIV service uptake in Kabale, Uganda

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ABSTRACT

Men's limited understanding of family planning (FP) and harmful cultural gender norms pose obstacles to women's FP use. Thirty-two model men called 'Emanzis' were recruited from the community in Kabale, Uganda to lead men from their peer group through a 10-session curriculum designed to transform gender norms and motivate men to engage in FP and HIV services. Cross-sectional surveys were conducted before ($n = 1251$) and after ($n = 1122$) implementation. The Gender Equitable Men (GEM) Scale was used to assess the effect on gender attitudes. The intervention achieved negligible changes in responses to GEM items. Improvements in some gender-influenced health-seeking behaviours and practices in men were noted, specifically in visiting health facilities, HIV testing, and condom use. For future application, the intervention should be adapted to require higher peer educator qualifications, longer intervention duration, and more frequent supervision. Practical guidance is needed on where to direct investments in gender-transformative approaches for maximum impact.

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Gender; male engagement;
HIV; family planning;
community

Introduction

Recent global commitments to eliminate new paediatric HIV infections acknowledge that preventing unintended pregnancies among women living with HIV is essential to achieving this goal (UNAIDS, 2011b). However, gaps persist in the delivery of integrated services that effectively meet the reproductive health needs of women and couples with HIV (UNAIDS, 2011a; Wilcher & Cates, 2009). Gender¹ inequality and inequitable gender norms (IGN), including intimate partner violence (IPV),² are increasingly recognised to negatively influence sexual and reproductive health-related behaviours and reproductive health outcomes in sub-Saharan African and globally (Glasier, Gulmezoglu, Schmid, Moreno, & Van Look, 2006; Pulerwitz & Barker, 2008; WHO, 2013a). Unequal power relations between men and women and differential access to education and financial resources allow men to dominate decision-making regarding 'family planning (FP)', or

the use of contraceptive methods that allows people to attain their desired number of children and spacing of pregnancies (Blanc, 2001; Mbonye, Hansen, Wamono, & Magnussen, 2010; McCleary-Sills, McGonagle, & Malhotra, 2012; Oyediran & Isiugo-Abanihe, 2002; Shahjahan et al., 2013; Soldan, 2004; WHO, 2007; WHO, 2015).

Women have described their male partners' resistance to FP and their fear of spousal retaliation as barriers to their uptake and continued use of FP methods (Bankole & Singh, 1998; Biddlecom & Fapohunda, 1998; Miller, Severy, & Pasta, 2004). Research from several African contexts has found that men's limited knowledge and understanding of FP, as well as deeply embedded ideas about appropriate gender roles for women and men, pose obstacles to male support for and participation in FP services (Baker et al., 2014; Faines, Moland, & Tylleskar, 2011; Kaida, Kipp, Hessel, & Konde-Lule, 2005; Nalwadda, Mirembe, Byamugisha, & Faxelid, 2010; Onyango, Owoko, & Oguttu, 2010). Finally, women who experience IPV have particular difficulty using contraception and are more likely to experience unintended pregnancies and unsafe abortions than women with no history of IPV ('Gender equity is the key to maternal and child health', 2010).

Efforts to provide integrated FP and HIV services may fall short if they do not consider gender-based obstacles to service uptake and contraceptive use. Indeed, governments worldwide and many international donors have embraced the importance of addressing gender inequality to improve reproductive health outcomes, such as fewer unintended pregnancies (Pallitto et al., 2013; PEPFAR, 2013; USAID, 2012). From these commitments, a movement has emerged specifically focused on constructively engaging men in efforts to address gender inequality by working with them to challenge harmful gender norms and enlist them as supportive partners for women's health. As alliances such as the MenEngage network attest, non-governmental organisations, national governments, UN partners and others around the world are implementing, evaluating and advocating for programmes that work with men and boys to promote gender equality (Barker, Ricardo, Nascimento, Olukoya, & Santos, 2010; Dworkin, Treves-Kagan, & Lippman, 2013; Pettifor et al., 2015).

Male involvement interventions that have been evaluated indicate that these interventions hold promise as effective strategies to reduce risk of unintended pregnancy and HIV infection and improve access to and use of health services. A 2007 World Health Organisation (WHO) review of 58 interventions designed to involve men and boys in achieving gender equality and better health concluded that well-designed male involvement interventions were effective at improving men's attitudes and behaviours towards sexual and reproductive health, HIV prevention, IPV, and other health outcomes (Barker, Ricardo, & Nascimento, 2007). The review also found that interventions rated as being 'gender transformative', or including deliberate discussions of gender and masculinity and clear efforts to transform harmful gender norms, had a higher rate of effectiveness. A more recent review found that gender-transformative interventions with men can increase protective sexual behaviours, prevent IPV, and improve gender inequitable attitudes (Dworkin et al., 2013).

Several studies have documented the effectiveness of male involvement interventions on use of FP services. Studies in Zambia, Kenya, Rwanda, and Ethiopia testing clinic-based interventions to integrate FP and HIV services and targeting couples reported increases in contraceptive uptake (Bradley, Gillespie, Kidanu, Bonnenfant, & Karklins,

2009; Khu et al., 2013; Ngure et al., 2009; Stephenson et al., 2011; Wall et al., 2013) or a decrease in pregnancy incidence (Ngure et al., 2009; Wall et al., 2013). In Nigeria, a referral-based model of FP/HIV integration led to an increase in FP clinic attendance by men referred from HIV clinics (Chabikuli et al., 2009). Programmes in India, Turkey, and Jordan to involve men in FP through group education and couples counselling found increased knowledge, use and communication in relation to FP services in couples (Turan, 2002; Varkey, 2004; Yassa & Farah, 2003). In Zimbabwe and Guinea, community outreach and mobilisation activities targeting men also led to improvements in communication about and use of FP (Blake & Babalola, 2002; Kim & Marangwanda, 1997). In Malawi, a study testing a programme that used a peer-delivered educational intervention targeting husbands found significant increases in contraceptive use in the intervention arm compared to the control arm. The intervention included information about FP, discussions about gender roles, and an emphasis on joint decision-making about fertility and contraceptive desires. Increased ease and frequency of communication within couples were significant predictors of contraceptive uptake (Shattuck et al., 2011). In Uganda, a gender-transformative intervention implemented by Sonke Gender Justice that sought to engage men in sexual and reproductive health as clients, equal partners and advocates of change had a number of positive outcomes. These included a significantly greater number of men accessing and supporting their partners to access sexual health services, increased sexual and reproductive health awareness, reported sharing of domestic duties and contraceptive decision-making, and men displaying a decreased tolerance for domestic violence (Stern, Pascoe, Shand, & Richmond, 2015).

Despite this accumulating evidence, still not known is whether efforts to integrate FP and HIV services are made more effective with a specific focus on men, their gender attitudes and behaviours, and their role in women's care-seeking behaviours. To address this gap, we tested an intervention aimed at promoting equitable gender norms (EGN) and engaging men in FP and HIV services. The study was conducted in Kabale district in Southwest Uganda, an area characterised by sociocultural norms that are oppressive to women and stereotypes related to masculinity and femininity that promote these harmful behaviours (Ellis, Manuel, & Blackden, 2011). IPV is prevalent in this setting with 54% of ever-married women aged 15–49 reporting in a national survey experience with physical, sexual or emotional violence committed by their male partner (Uganda Bureau of Statistics, 2012). That same survey showed that almost half of men aged 15–49 surveyed (46%) agreed that a husband is justified for beating his wife for at least one of five specific reasons. It revealed only 66% of men in the Southwest region believe that a woman is justified in refusing sexual intercourse with her husband if she knows he has sex with other women. The survey further found that only 66% of women aged 15–49 reported that they make decisions by themselves or jointly with their husband about their own health care in comparison to 96% of men who make decisions about their own health care either alone or jointly with their wife (Uganda Bureau of Statistics, 2012). Qualitative research from Uganda suggests that traditional gender dynamics are evident specifically in the context of reproductive and HIV health decision-making and affect both men's and women's participation in these services (Kabagenyi et al., 2014; Mbonye et al., 2010). These findings from Uganda are consistent with other research in sub-Saharan Africa that has shown that harmful gender norms confer power on men to dominate reproductive health decision-making in their relationships and often negatively

impact uptake and adherence in relation to these services (Faines et al., 2011; Kaida et al., 2005; Nalwadda et al., 2010; Onyango et al., 2010; Skovdal et al., 2011).

Grounded in this context, this paper presents a sub-analysis examining the extent to which the community-based intervention component focused on male engagement achieved its aim of transforming harmful gender attitudes, norms, and behaviours among men participating in intervention activities.

Methods

The main study methods and outcomes are presented in another journal article in preparation and are summarised here. The study was conducted in eight public sector health centres and their catchment areas in Kabale district in Southwest Uganda. We compared two interventions aimed at increasing FP uptake among HIV care and treatment (C&T) clients. The foundation of each intervention was the incorporation of FP services into HIV C&T services. HIV C&T providers were trained to counsel on FP and provide methods to HIV-positive women who do not wish to become pregnant. In half the sites, we added a multi-component intervention aimed at promoting EGN and engaging men in FP and HIV services. The community-based gender intervention component consisted of peer education for men to build knowledge of FP and HIV, encourage men's use of health services, and promote gender equitable norms. The facility-based gender intervention component included training HIV C&T providers to counsel both women and men on FP, individually and as couples. HIV C&T providers were trained on gender-based influences on health behaviours, challenging harmful gender norms, attitudes and behaviours, and provision of couples' HIV testing and FP counselling services. Pre- and post-intervention cross-sectional surveys were conducted with a sample of male and female HIV C&T clients to assess changes in dual method use, the main study outcome. The sections that follow describe the methods and results associated with the community-based intervention component focused on challenging harmful gender norms, attitudes, and behaviours.

Intervention

The study team worked with community leadership throughout Kabale district in Southwest Uganda to identify 32 men perceived as role models in their communities. These men were nominated as role models on the basis of factors like accompanying their female partners to health facilities, participating in HIV testing and counselling with their female partners, supporting their female partners to have their children immunised and not perpetrating IPV. Final selection of the model men was based on community member voting and reported ability to read and write. The model men were not required to have prior knowledge of HIV, gender or reproductive health. Known as 'Emanzis', these model men were selected to serve as peer educators. The Emanzis worked in pairs, each assigned to the sub-district called a parish with a population of approximately 3000–4000 people. The Emanzis participated in a two-week training adapted from the Men As Partners (MAP) curriculum. The MAP model has been applied in diverse resource-limited settings to stimulate male support for women's reproductive health services (Pulerwitz & Barker, 2008). We selected MAP curriculum content focused on

understanding and challenging harmful gender norms, increasing men's knowledge about ways to protect their health and the health of their families, improving knowledge of FP and HIV, and encouraging participation in health services. We then tailored the MAP content by simplifying it for a limited-literacy audience and incorporating context-specific content, such as material to address men's excessive alcohol use. We translated the curriculum content into Ruyankole (the local language) and created handouts for the Emanzis' reference. In addition, we created a one-page summary of each session's key concepts for the Emanzis to use in when leading workshops. Training included sessions to build facilitation skills and a practicum for the Emanzis to practise teaching the workshop content.

Trained Emanzi pairs were charged with leading 6 groups of 20 men each (ages 18+) in their assigned parish through a 10-session workshop. The Emanzis used a simplified version of the curriculum described above that had sessions that were completely oral and did not require participants to read handouts or complete written exercises. The Emanzis recruited workshop participants by consulting local leaders and tapping into existing groups of men, like sports teams and church groups. The study team provided mentoring by visiting each Emanzi pair three times during the implementation period to ensure adherence to the training curriculum and reinforce leadership skills. The Emanzis were paid a monthly stipend of USD\$32. This amount was based on the average stipend paid to other community resource persons in the region.

Data collection

Study fieldwork was conducted between January 2013 and March 2014. Cross-sectional surveys were conducted with all 32 Emanzis and participants in the Emanzi-led workshops before ($n = 1251$) and approximately 6 months after ($n = 1122$) workshop completion. The pre-intervention surveys were conducted with all men who had been recruited to participate in the workshops. Eligible post-intervention survey respondents were supposed to have participated in the pre-intervention survey and completed at least one session of the Emanzi-led workshop. The surveys assessed attitudes and self-reported behaviours related to gender norms, knowledge and behaviours related to use of FP and HIV services, and relevant health- and care-seeking behaviours. The surveys used a structured instrument with fixed responses. The two rounds of survey data were treated independently, with no attempt to link responses at the individual or group level. All participants provided written informed consent.

The Gender Equitable Men (GEM) Scale was used within the surveys to assess knowledge, attitudes, and behaviours related to gender norms (Pulerwitz & Barker, 2008). This validated measurement tool has been used in research to measure relationships between perceived gender norms and reproductive health-related outcomes (Pulerwitz, Barker, Segundo, & Nascimento, 2006; Shattuck et al., 2013, 2011). We used 22³ of the GEM Scale's 24 items that examine 5 key areas related to gender norms, including violence, sexual relationships, reproductive health and disease prevention, domestic chores and childcare, and relationships with other men (Pulerwitz & Barker, 2008). The scale is composed of two subscales, the IGN subscale (15 items) and the EGN subscale (7 items) (Engender Health). We measured GEM scale items on a 5-point Likert scale (strongly agree to strongly disagree).

Analytic methods

Analysis of the GEM scale data consisted of several steps conventionally used in analysis of scale data (Costello & Osborne, 2005). We conducted exploratory factor analysis (EFA) with 22 GEM items to reduce the number of different measures of gender equity considered in the analyses. We pooled pre- and post-intervention data, assuming measurement invariance across time periods (Vandenberg & Lance, 2000). The scree plot used in principal components analysis indicated a two-factor solution, and we rotated the initial solution using an oblique rotation method (promax). The level of correlation between the factors was assessed using the FACTOR procedure in SAS. We then created composite scores for the factors that emerged from the EFA. Prior to the creation of the composite scores, the GEM Scale items were reverse coded as necessary so that higher score indicated more EGN. All items were standardised prior to the creation of the score in order to equalise their influence on the resulting composite scores.

We assessed the reliability of the two GEM composite scores by calculating separate Chronbach's α indices across each score's constituent GEM items. We computed the means and standard deviations for the individual items, along with the differences over time. We did not conduct statistical inference on these items in order to minimise experimental-wise error caused by multiple comparisons (Ottenbacher, 1998). We then compared pre- and post-intervention means of the composite scores for the IGN and EGN factors. Statistical significance of any pre/post-difference was assessed at the .05 level using independent *t*-tests, and the substantive significance was assessed by calculating standardised effect size estimates using Cohen's *d*. Finally, to complete exploratory data analysis, we observed the distribution of responses to the 5-point Likert scale for each of the GEM scale in the pre- and post-intervention period and computed the difference between these periods.

Results

Demographics

The demographic characteristics of the men participating in the two survey rounds, presented in Table 1, were largely consistent. Most participants reported either partial or total

Table 1. Demographic data.

	Pre (<i>N</i> = 1251) <i>N</i> (%)	Post (<i>N</i> = 1122) <i>N</i> (%)
Mean male age (range)	39.8 (18–64)	42.1 (18–75)
<i>Level of schooling</i> ^a		
Did not attend	56 (4.5%)	56 (5.0%)
Partial primary	456 (36.5%)	421 (37.6%)
Completed primary	302 (24.1%)	313 (27.9%)
Partial secondary	266 (21.3%)	202 (18.0%)
Secondary or above	171 (13.7%)	129 (11.5%)
<i>Marital status</i> ^a		
Single, never married	46 (3.7%)	21 (1.9%)
Married, monogamous	980 (78.3%)	943 (84.1%)
Married polygamous	41 (3.3%)	30 (2.7%)
Cohabitation/common law union	178 (14.2%)	116 (10.4%)
Widowed/divorced/separated	6 (0.5%)	11 (1.0%)
Currently living with partner	1063 (85.0%)	1084 (96.6%)

^aOne missing response.

completion of primary school as their highest level of education, and most were in a monogamous marriage. The mean age was higher from the pre- to post-intervention period from 39.8 years to 42.1 years, and a higher percentage of men reported being married in the post-intervention survey (84.1%) as compared to the pre-intervention survey (78.3%).

Participation in Emanzi-led workshops

Table 2 provides data from men participating in the Emanzi-led workshops. Overall, participation was high, with the majority of participants (65.1%) attending all 10 sessions. Nearly all men reported complete ‘confidence’ or trust in the credibility of the information that the Emanzis shared and high satisfaction with the workshop. Virtually all reported that they would recommend to a friend to participate in an Emanzi-led workshop.

Analysis of GEM score data

From the EFA, the two factors that emerged after rotation – EGN and IGN – were consistent with previous measurement work on the items conducted by Pulerwitz and Barker (2008). Each item associated with the IGN factor had moderate-to-high positive loadings (.4–.6); similarly, the loadings associated with the items under EGN ranged from .4 to .7. Chronbach’s α was .70 for IGN and .66 for EGN, suggesting low-to-moderate internal consistency for the two factors. Six items (listed at the bottom of Table 3) did not clearly fit on either factor – either because their loadings on both factors were low (<.4) or because they loaded equally on both factors. These items were not included in the composite IGN or EGN measures. The correlation between the two factors after rotation as measured by factor analysis was .07, indicating that a fair number of individuals in the populations might be observed to simultaneously hold strongly equitable and strongly inequitable gender attitudes.

Table 2. Participation in Emanzi-led workshops.

	Post total (n = 1122) n (%)
<i>Number of sessions attended</i>	
1 session	17 (1.5)
2–5 sessions	93 (8.3)
6–9 sessions	266 (23.7)
All 10 sessions	731 (65.2)
Unsure	15 (1.3)
<i>Confidence in the information that Emanzi shared with group</i>	
Completely confident	1075 (95.8)
Somewhat confident	42 (3.7)
Not at all confident	5 (0.5)
<i>Satisfaction with Emanzi-led workshops^a</i>	
Highly satisfied	1095 (97.7)
Somewhat satisfied	24 (2.1)
Not at all satisfied	2 (0.2)
<i>Would recommend to a friend that he participate in the Emanzi-led workshop^b</i>	
No	2 (0.2)
Yes	1117 (99.7)
Unsure	1 (0.1)

^aOne missing response.

^bTwo missing responses.

Table 3. Means and standard deviations of scores of individual GEM items.^a

	Pre-intervention (<i>n</i> = 1250) Mean (SD)	Post-intervention (<i>n</i> = 1122) Mean (SD)	Difference
<i>Factor 1: IGN</i>			
A man should have the final word about decisions in his home ^b	2.28 (1.51)	2.35 (1.54)	0.07
It is the man who decides what type of sex to have ^b	2.65 (1.48)	2.75 (1.60)	0.10
Changing diapers, giving the kids a bath and feeding kids are the mother's responsibility ^b	1.67 (1.17)	2.23 (1.45)	0.57
A woman's most important role is to take care of her home and to cook for her family ^b	1.51 (0.97)	1.87 (1.22)	0.35
It is a woman's responsibility to avoid getting pregnant ^b	2.43 (1.54)	2.61 (1.58)	0.18
Men are always ready to have sex ^b	2.27 (1.45)	2.22 (1.48)	-0.05
A man needs other women even if he has a good sexual relationship with his wife ^b	3.19 (1.58)	2.77 (1.62)	-0.42
A man should be outraged if his wife asks him to use a condom ^b	3.89 (1.27)	3.94 (1.51)	0.05
Men need sex more than women do ^b	2.28 (1.34)	2.07 (1.33)	-0.21
<i>Factor 2: EGN</i>			
A man should know what his partner likes during sex	4.52 (0.87)	4.79 (0.50)	0.27
A man and a woman should decide together what type of contraceptive to use	4.72 (0.59)	4.77 (0.54)	0.05
If a man gets a woman pregnant, the child is the responsibility of both	4.85 (0.48)	4.78 (0.60)	-0.07
A couple should decide together if they want to have children	4.76 (0.55)	4.77 (0.58)	0.00
A woman can suggest using condoms just like a man can	4.00 (1.24)	4.33 (0.96)	0.33
It is important that a father is present in the lives of his children, even if he is no longer with the mother	4.72 (0.72)	4.63 (0.71)	-0.08
It is important for a man to have a male friend with whom he can talk about his problems	4.44 (0.99)	4.47 (0.90)	0.04
<i>GEM items dropped from the analyses</i>			
You do not talk about sex, you just do it ^b	4.25 (1.13)	4.24 (1.30)	-0.01
If someone insults a man, he should defend his reputation with force if he has to ^b	2.43 (1.52)	2.39 (1.54)	-0.04
Women who carry condoms on them are promiscuous ^b	2.99 (1.60)	3.39 (1.68)	0.40
A woman should tolerate violence to keep her family together ^b	2.00 (1.38)	2.32 (1.55)	0.32
There are times when a woman deserves to be beaten ^b	4.52 (1.00)	4.70 (0.89)	0.19
It is okay for a man to hit his wife if she will not have sex with him ^b	4.57 (0.95)	4.77 (0.78)	0.20

^aRange is from 1 to 5, with greater scores indicating more EGN.

^bReverse coding was used.

**Significant >.05.

The mean standardised IGN score increased by .06 between pre- and post-intervention measurements, indicating a change towards more EGN. The *t*-test to assess the difference showed a significant difference ($t = -2.76$, $p = .0058$). However, the value of Cohen's *d*, computed to assess the effect size, was .11; any *d* value below .2 is considered a very small effect (Cohen, 1992). The mean standardised EGN score also increased by .06, and the *t*-test to assess the difference also showed a significant change between pre- and post-intervention (-3.27 and $p = .0011$). Again, computation of Cohen's *d* (.13) indicated a very small effect size.

The means and standard deviations of the individual GEM items as measured pre- and post-intervention are presented in Table 3, grouped by the factor on which they loaded most strongly. Increases from the pre- to post-intervention values indicate improvements. The most strongly held IGN in both survey rounds was the item, 'A woman's most important role is to take care of her home and to cook for her family'. This item also showed the greatest increase between the pre and post surveys. On average, most men in both survey rounds agreed with statements indicating EGN. The most substantial improvements over

time were associated with the statements, ‘A man should know what his partner likes during sex’ and ‘A woman can suggest using condoms just like a man can’.

Likert-scale results of individual GEM Scale items

Figure 1 presents distributions of Likert-scale responses for the pre- and post-intervention samples for items selected to illustrate different patterns in attitudinal changes. The data showed improvements in attitudes towards IPV, for example, increases in ‘strongly disagree’ for all three items shown in Figure 1(a). Despite these positive shifts, the majority ‘strongly agreed’ with the inequitable statement, ‘A woman should tolerate violence to keep her family together’ both pre and post. There were positive shifts in items exploring attitudes towards *gender and condom use*, shown in Figure 1(b).

There were mixed results concerning *gender and family roles*, shown in Figure 1(c), with increases over time in ‘strongly disagree’ for the statements, ‘Changing diapers, giving the kids a bath and feeding kids are the mother’s responsibility’ and ‘A woman’s most important role is to take care of her home and to cook for her family’. On the other hand, the majority agreed with these inequitable statements, with small increases in ‘agree’ from pre- to post-intervention rounds.

There was little change over time in responses for the GEM items related to *gender, contraceptive decision-making and sexuality*, shown in Figure 1(d), which reflected mixed gender equitable attitudes. The majority of respondents ‘strongly agreed’ with the equitable statement ‘A man and a woman should decide together what type of contraceptive to use’, yet at the same time ‘strongly agreed’ with the inequitable statement ‘A man should have the final word about decisions in his home’.

We also noted little change for the GEM items related to *gender, responsibility and childbearing* shown in Figure 1(e). The majority of participants in both rounds strongly agreed with the equitable statements, ‘If a man gets a woman pregnant, the child is the responsibility of both’ and ‘It is important that a father is present in the lives of his children, even if he is no longer with the mother’. Yet, the majority also ‘strongly agreed’ with the inequitable statement, ‘It is a woman’s responsibility to avoid getting pregnant’.

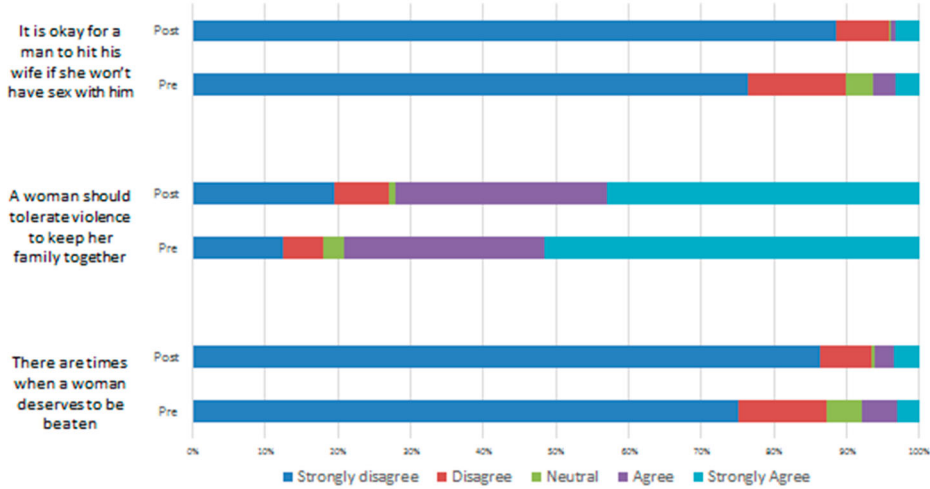
Health- and care-seeking behaviours

Table 4 presents descriptive statistics of reported health- and care-seeking behaviours measured before and after the intervention. We observed some statically significant increases in reported health-seeking behaviours, including seeking clinic services for self or accompanying a partner in the past five months. There were also increases in respondents reporting condom use with main partners over the past three months, ever having been tested for HIV, and communicating with main partners on using a method to avoid pregnancy. Respondents reporting use of a method other than condoms to prevent pregnancy in the past three months decreased over time, but the change was not significant.

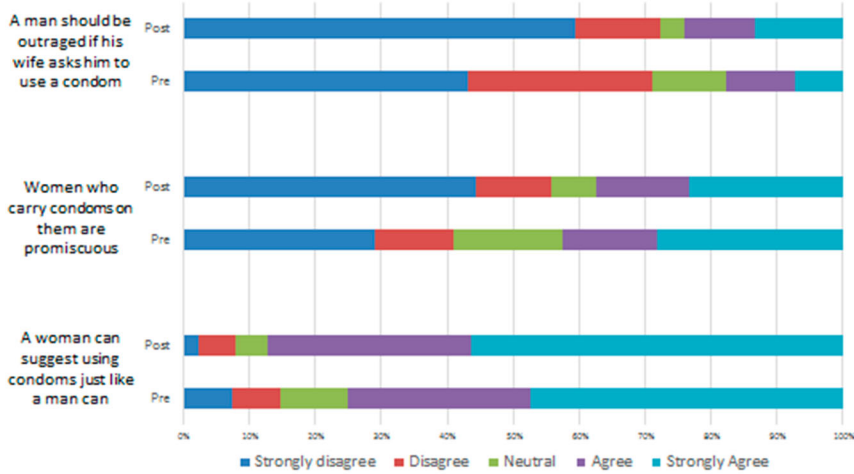
Discussion

This analysis is part of a larger study testing gender-transformative approaches to improve women’s reproductive health outcomes. The GEM Scale analysis, showing small effect

(a) Violence against Women



(b) Gender & Condom Use



(c) Gender and Family Roles

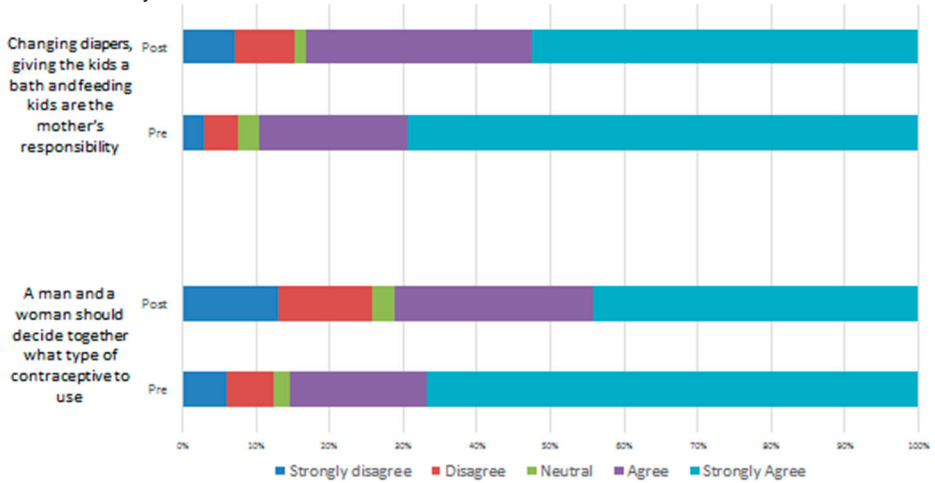
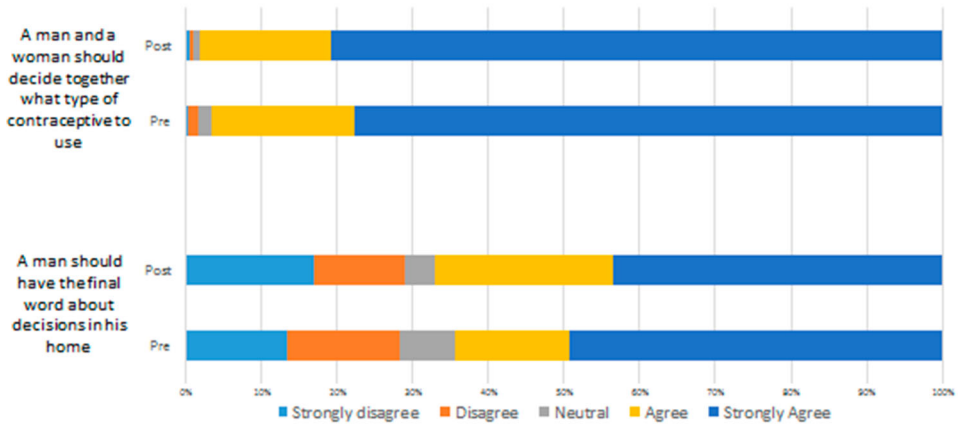


Figure 1. Likert-scale results of individual GEM Scale items.

(d) Gender, Contraceptive Decision Making and Sexuality



(e) Gender, responsibility and childbearing

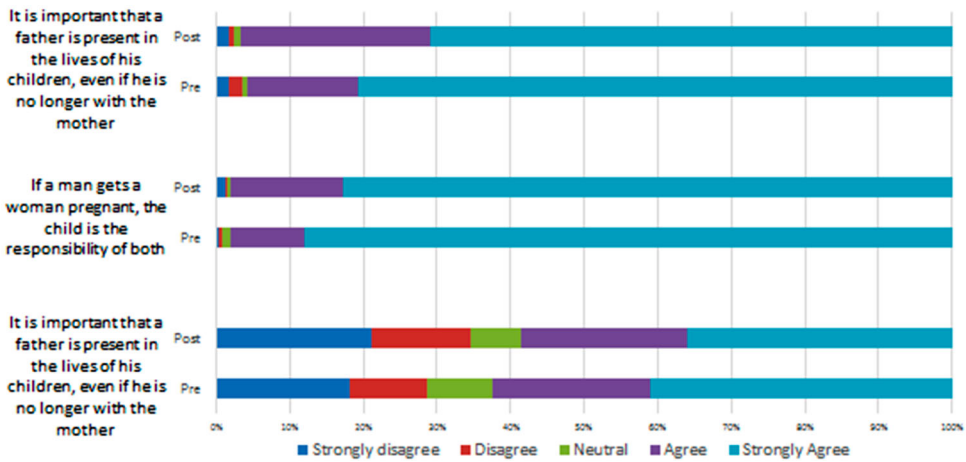


Figure 1. Continued.

Table 4. Other community survey responses related to health- and care-seeking behaviours.

Survey question	Pre (n = 1251) n (%)	Post (n = 1122) n (%)
In the past five months, have you gone to the health centre to seek services for yourself?*	503 (40.2)	700 (62.4)
In the past five months, have you accompanied your wife/partner to the health centre for care that she needed?*	366 (29.3)	623 (55.5)
How often did you use condoms during sex with your main partner in the past 3 months? ** Any condom use, i.e. anything besides 'never'	173 (13.9)	364 (32.8)
I do not want to know the result, but have you ever been tested for HIV?*	894 (71.5)	983 (87.6)
Have you and your main partner ever talked about using a method to avoid getting pregnant?	971 (77.7)	886 (79.9)
Have you and your main partner used a method other than condoms to prevent pregnancy in the past three months?	785 (62.8)	666 (59.5)

**Significant, χ^2 , $p < .0001$.

sizes on IGN and EGN, revealed that overall the intervention did not achieve programmatically meaningful changes in gender attitudes among men targeted by the community-based intervention. Examination of the mean scores of individual GEM items, however, indicated some positive shifts in gender norms over time, such as notions about women's responsibilities in the home and women's use of condoms. Another interesting finding is that respondents in both survey rounds expressed simultaneous support for both gender inequitable and gender equitable norms. This finding underscores how gender attitudes are nuanced; a community or an individual can embrace seemingly inconsistent views about gender equality, depending on the matters under consideration.

The distribution of responses for selected GEM Scale items showed that attitudes about some matters were skewed in a positive manner. For example, in both the pre- and post-intervention periods, over three quarters of respondents strongly disagreed with statements normalising violence against women. Other items showed a diversity of viewpoints, with a split between the respondents subscribing to gender equitable and inequitable norms. This was the case for the statement, 'Women who carry condoms on them are promiscuous'. For some GEM Scale items, the results may appear to indicate strong support for gender inequitable norms, but the responses must be interpreted in light of the local cultural context as opposed to predominant 'Western' norms. For example, most respondents agreed with statements, 'A woman's most important role is to take care of her home and to cook for her family' and 'Changing diapers, giving the kids a bath and feeding kids are the mother's responsibility'. Such views should not necessarily be interpreted as an indication of the subordination of women; conceivably, these responses are an expression of esteem for women if household management and child rearing are highly valued in society. At the same time, this study produced evidence of widely held harmful gender norms that plausibly interfere with women's use of health services and contraceptive uptake. For example, the proportion of respondents indicating that men need multiple sexual partners increased over time, and the majority of respondents strongly agreed with the statement 'A woman should tolerate violence to keep her family together'.

The documented improvements in health behaviours and care-seeking among men are encouraging; however, questions remain regarding how to harness male presence at the clinic or participation in HIV services into opportunities to transform gender norms and improve health outcomes for women (Montgomery, van der Straten, & Torjesen, 2011; Ramirez-Ferrero, 2012). Indeed, some research has shown that increased male participation actually had negative consequences on their female partners' use of health services (Becker, Mlay, Schwandt, & Lyamuya, 2010; Brusamento et al., 2012).

Limitations pertaining to the intervention help to explain the observed limited impact on gender norms. A process evaluation – reported in detail in another article – uncovered notable weaknesses in intervention implementation. The literacy skills of Emanzis were established based on self-reporting and without other confirmation and might not have been reported accurately in all cases. It appears that weak reading skills may have compromised their ability to follow the curriculum as they led workshops. Many of the Emanzis, accustomed to oral tradition, struggled with the concept of following a sequential, written curriculum and teaching concepts through the interactive activities inherent in the curriculum. Furthermore, the time allotted for the Emanzi training was insufficient for comprehensive mastery of the content that included substantial technical information on FP and

HIV and new concepts on gender. As mentioned previously, Emanzi were not required to have a background in HIV, FP or reproductive health. Finally, there was inadequate time in the Emanzi training to cover content focused on building the Emanzi's facilitation skills.

To aid interpretation of study results, the research team shared findings at a meeting convened in the seat of the district where the study was implemented. Participating stakeholders included district health officials, health facility managers, local government chiefs, and all 32 Emanzi from the intervention sites. At this meeting, the Emanzi suggested that the intervention could be made more effective by lengthening the course, explaining that by the time men took the course seriously, the 10 sessions were completed. Another common suggestion was to include men's wives in the training, as the women tended to be quite curious and in some cases suspicious about what men were learning. Ironically, one participant suggested, with agreement from others, that sessions should be held in the morning since men tend to get drunk as the day progresses.

We also acknowledge that the structure of our intervention differed in important ways from other male engagement interventions that have proven effective at changing gender norms. For example, both Program H in Brazil and the Malawi Male Motivator Project (Pulerwitz et al., 2006; Shattuck et al., 2011) utilised peer facilitators who were well versed in gender issues and the health issues at hand, while our intervention relied on training men who did not necessarily have a background in gender, HIV or FP. Both of these interventions also focused on smaller and more concentrated populations and had an overall intervention exposure period of at least six months. The groups of men in our study were exposed to the 10-session group education intervention over a period of 2.5 months. Research testing future community-based educational interventions could include examination of dose response to determine the minimum number of sessions required to achieve the desired gender-transformative effect. Our intervention time frame may have been too short to observe changes in gender norms. Whereas Program H utilised a field-test curriculum, the intervention reported here was the first time implementing the curriculum and essentially served as a field test from which lessons for improvement can be learnt. Finally, Program H and prior implementation of the MAP curriculum included mass media campaigns, and the Malawi Male Motivator Project involved home visits by peers instead of group education sessions. Our intention to implement a financially sustainable intervention that could be implemented with local technical resources precluded inclusion of these and other components.

This study's limitations are also acknowledged. The low reliability of the GEM composite scores, as indicated by the Chronbach's α value, limits their accuracy in evaluating intervention effectiveness. Furthermore, GEM Scale survey questions were not validated in the Ugandan context through methodological research, such as, to confirm expected interpretation of the wording, both in English and in the translation into local language. Reporting bias is another potential limitation of this study, particularly responses related to sensitive matters like monogamy. Responses in general in the post-intervention period are particularly prone to social desirability bias due to increased familiarity with favourable answers following sensitisation to gender issues. Finally, the absence of a comparison group weakens our ability to rule out that documented improvements could have been caused by factors extraneous to the study. However, based on the study team's thorough familiarity with this remote district

and the supports introduced during the study period, the likelihood of such confounding is low.

The study also had a number of strengths, including that it tested a multifaceted intervention with components at both the facility and community level designed to be mutually reinforcing. It went beyond measuring male involvement in terms of clinic attendance and participation in HIV services and sought to cultivate more substantial male involvement that would measurably affect gender norms and health outcomes. Finally, this was one of few studies to measure changes in gender attitudes using both GEM subscales (IGN and EGN).

Conclusion

While the tested intervention did not prove to be effective at changing gender norms, the study nonetheless generated important lessons learnt regarding interventions focused on EGN. On a practical level, our experience underscores the importance of field testing interventions to support adaptation to new contexts. This seemingly obvious point is often overlooked in both intervention research and programming due to short timelines and budgets; yet, investment in formative evaluations to refine interventions pays dividends in effectiveness (Stetler et al., 2006). Similarly, greater investment is often needed in trainings to ensure sufficient time for knowledge transfer and skill building (Kok et al., 2014). Finally, future community-based interventions focused on constructive male engagement should explore using an existing cadre of community health workers such as peer facilitators. Their pre-existing knowledge of health issues and their communications experience could serve as a good foundation on which to add new content promoting EGN.

Global health policy-makers and funders increasingly call for gender-transformative approaches to programmes. In theory, such approaches will lead to greater, more sustainable impact by addressing upstream drivers of poor health that are rooted in gender inequality. While evidence of the relationship between gender norms and inequalities and health outcomes is well established, the evidence base for interventions that are effective at both increasing gender equality and improving health outcomes, including FP- and HIV-related outcomes, is limited. We sought to contribute much-needed evidence in this area with this study. However, our evidence-informed approach of working with men to challenge gender inequitable attitudes and harmful norms of masculinity was largely ineffective. Instead of helping to shape gender-transformative best practice, this study brought to the forefront the challenges inherent in working with communities to change deeply held cultural beliefs. It also demonstrated the difficulty in taking a gender-based intervention that has been proven to work in one setting and replicating it elsewhere to the same effect. If implementers are to effectively translate into practice the policy directives to integrate gender into health programmes, we need to better understand what interventions will work best in what settings, what intervention components are essential to retain when replicating or scaling up a proven gender intervention, and how best to measure the gender-related impact. Changing gender norms and achieving greater gender equality do not happen overnight; in all likelihood, it requires sustained, well-resourced interventions delivered at scale. Practical guidance is needed on where to direct investments in gender-transformative approaches for maximum impact.

Notes

1. The WHO defines gender as society's collective ideas about the appropriate roles, rights, duties, responsibilities, accepted behaviours, opportunities and the status of women and men in relation to one another that can vary within and between cultures and can change over time (WHO, 2009).
2. WHO defines IPV as intimate partner or ex-partner behaviour that produces 'physical, sexual or psychological harm, including physical aggression, sexual coercion, psychological abuse and controlling behaviors' (WHO, 2013b).
3. Omitted items include, 'I would never have a gay friend', due to the sensitive nature of homosexuality in Uganda; and 'If a woman cheats on a man, it is okay for him to hit her', deemed locally to be covered by the item, 'There are times when a woman deserves to be beaten'.

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