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ORIGINAL ARTICLE

Community based reproductive health (RH) intervention resulted in increasing age at marriage: the case of Berehane Hewan Project, in East Gojam zone, Amhara region, EthiopiaTekle-Ab Mekbib¹ and Mitike Molla²*Abstract*

Background: Among adolescent girls aged 10-19 years who are living in West Gojam zone, Amhara region, poor school attendance, social isolation, early marriage and poor utilization of reproductive health (RH) services were observed before the launching of the Berhane Hewan project. To mitigate these problems, Berhane Hewan was initiated as a multi-component intervention. After two years of implementation of the project, it was shown that marriage was delayed, school attendance and family planning use increased. However, it was difficult to ascertain which components exerted relatively greater influence in bringing about these behavior changes.

Objectives: To explore the contribution of different reproductive health (RH) and other interventions in delaying early marriage, increasing school attendance and FP utilization.

Methods: A cross-sectional study design was conducted using both qualitative and quantitative methods in August and December 2009, respectively. The qualitative data were collected using nine in-depth interviews while the quantitative data was collected from 150 respondents among fathers; mothers and husbands of girls who were participants of the Berhane Hewan project.

Results: The husband's group was generally younger than parent respondents who ranged from 30-60 years of age. The vast majority of male respondents were farmers, while females were housewives. The majority of respondents mentioned provision of school supplies as influential in keeping girls in school (88% of fathers, 92% of mothers and 60% of husbands). Among the intervention components that promoted delayed marriage, Community Conversations was mentioned most often by respondents (76% fathers, 66% mothers and 84% husbands). Group mobilization of girls was mentioned by 68% of fathers, 66% of mothers and 78% of husbands. Community conversation (85% fathers, 74% mothers and 76% husbands), group meetings by mentors (56% fathers, 52% mothers and 64% husbands), and house-to-house visits by mentors (48% fathers, 42% mothers and 44% husbands) were mentioned first, second and third, respectively as intervention components that brought about improvements in FP knowledge and practice among Berhane Hewan program participants. In-depth interviews resulted in giving community conversation, social mobilization and school incentives the same priority sequence.

Conclusion: Community conversation, social mobilization and school material support could be used as major intervention components to replicate the Berhane Hewan program. For those who want to delay marriage and improve RH/FP utilization among adolescent girls, the above interventions could be enough to bring about the desired improvements among adolescents. However, in order to avail opportunities for girls education apart from the interventions detailed above, school material support is required as one of the interventions to achieve better results. Nevertheless, these preliminary findings have to be strengthened through a carefully monitored qualitative and quantitative study by using major intervention components/models detailed above to explore the critical components that influenced behavior change that would allow programmers and policymakers to upscale Berhane Hewan in a cost-effective and sustainable manner.

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Introduction

Arranged marriage at an early age is common in most developing countries in general and in Ethiopia in particular. In these situations, girls are usually forced to marry an older person without their prior consultation and knowledge. This could result in complicated reproductive health (RH) outcomes. With the advent of HIV and AIDS, this practice is fueling the spread of HIV to girls and women (1). Ethiopian girls are not free from this where culture, underdevelopment and poverty aggravate the situation (2, 3).

In Ethiopia, adolescent girls particularly in rural areas face forced early marriage, and have limited opportunities for education (4). In order to understand the situation of adolescence in rural Amhara, a formative research was conducted in 2004. In this study, among adolescent girls aged 10-19 years living in West Gojam zone, Amhara region, poor school attendance, social isolation, early marriage and poor utilization of reproductive health (RH) services were observed (5). In order to improve the situation of adolescent girls, a project was initiated as a pilot in Mosebo kebele Yimanadinsa woreda, West Gojam zone, Amhara region. This project, entitled Berhane Hewan ("Light for Eve" in Amharic) has been implemented by the Ministry of Youth and Sports (MOYS) through its regional, zonal and woreda offices in Amhara region, since 2004. The project addresses the wellbeing of adolescent girls in rural Amhara by promoting girls' education and delayed marriage. Berhane Hewan is currently being implemented in three districts of Amhara region: Yilmanadinsa, Mecha and South Achefer.

Berhane Hewan's overall goal is to delay marriage and support girls who are already married. The program mobilizes girls aged 10 to 19 into clubs and supports them to remain in school and improve their RH needs through availing information and services. Currently, over 12,000 girls are members of the program.

During the pilot phase, multiple intervention components such as community conversation where community members periodically meet to discuss social matters; and social mobilization activities where mentors conduct house-to-house visits and convene group meetings were implemented. In addition, school material support; household incentives (ewes to adolescent girls); and creating safe spaces so that married and unmarried girls attend programs such as non-formal education (NFE) and life skill training as well as RH information and referrals for services are also part of the Berhane Hewan program, among others.

Berhane Hewan was evaluated in 2006 and changes associated with the project were observed including delays in marriage and increases in school attendance among younger adolescents, and increases in family planning use (6). However, given that Berhane Hewan was a multi-component intervention, it was difficult for evaluators to ascertain which components exerted relatively greater influence in bringing about behavior change.

Identifying the critical components that influenced behavior change would allow programmers and policymakers to upscale Berhane Hewan in a cost-effective and sustainable manner. Therefore, the aim of this study was to explore the contribution of different RH and other interventions in delaying early marriage, in increasing in school attendance and FP utilization.

Methods

The study used a cross-sectional study design (both qualitative and quantitative methods) and was conducted in Mosebo kebele, Yilmanadinsa district, West Gojam zone, Amhara region in the Berhane Hewan pilot site, in August and December 2009. An in-depth interview guide was developed for the qualitative component of the study.

The quantitative data is based on 150 interviewees and equal proportion of mothers, father, mothers and husbands participated.

Components of the Berhane Hewan Program interventions

Berhane Hewan was a multi-component intervention that included mobilization of adolescent girls to school, community conversations where community members periodically meet to discuss social matters; and social mobilization activities where mentors conduct house-to-house visits and convene group meetings were implemented. In addition, the program also included school material support; economic incentives; creation of safe spaces, non-formal education (NFE), life skill training, RH information and referrals for services.

Mentors conducted house-to-house visits to identify eligible adolescent girls aged 10 to 19 to participate in the Berhane Hewan program. Once identified, girls are invited to join the program and if necessary, mentors negotiate with gatekeepers such as husbands and in-laws for the girl's participation. The other major component of Berhane Hewan is increasing adolescent girls' access to formal and NFE. Adolescent girls who are going to school and those who want to join the formal school are encouraged by the program. School material support is provided to all by the project. Girls who could not read or write can join the NFE clubs in order to get lessons in Amharic alphabet, simple arithmetic, environmental science, English alphabet, etc. After getting the NFE for 18 months, these girls are eligible to join the fourth grade in the formal school.

Community conversation meetings took place twice per month with community members discussing social issues particularly harmful traditional practices (HTPs). Participants explore options to address harmful practices affecting adolescent girls such as early marriage, female genital mutilation/cutting (FGM/FGC), and marriage by abduction. Mosebo girls who participated in the Berhane Hewan program were to empower them economically.

Selection of respondents

Study participants, including husbands, mothers and fathers were selected purposefully through different girls clubs. The mentors of respective clubs listed the names of the fathers, mothers and husbands of project beneficiaries and selected fifty out of the listed names for the different categories by a simple lottery method out of a total of 300 eligible participants. The project coordinator of the district facilitated the identification of respondents.

Data collection

For the qualitative study, an in-depth interview guide was developed including the following topics: questions about places where adolescent girls meet to chat and mix with other girls other than school and home; school attendance by adolescent girls. It also included questions about the impact of various program components such as economic incentives, community conversations, school material support, and mobilization of girls into clubs. In addition, a standard questionnaire was developed to collect quantitative information on the socio-demographic profile of respondents, school attendance, marriage timing and family planning utilization. Survey participants were asked about the importance of various intervention components in increasing school attendance, delaying marriage and increasing FP use.

Interviewers for the qualitative study were graduates in the social sciences and experienced in qualitative research. They were trained for two days on the discussion guide and qualitative interviewing techniques. On the last day of the training, interviewers pre-tested the instrument among respondents from Bahirdr and discussed how to improve the guide and their interview techniques. Two interviewers, one male and one female, were assigned to the research site. The male interviewer interviewed males, and females interviewed females. Where possible, the interviews took place at participants' homes.

Interviews were conducted in Amharic, tape recorded, translated into English and transcribed. Likewise, the survey questionnaire was conducted in Amharic. Informed consent was obtained from all respondents

Data processing & analysis

Qualitative data was analyzed comparing similar themes across the three types of informants and summarized. Quotes are used in the report to reflect illustrative or common themes that emerged from respondents. The data from completed questionnaires were analyzed using simple frequencies followed by ranking of responses. Averages and distribution tables are presented.

Table 1: Demographic profile of respondents (n=150)

| Characteristics | Mothers (n=50) | Fathers (n=50) | Husbands (n=50) | All | Percent |
|-----------------|-------------------|-------------------|--------------------|-----|---------|
| Age | | | | | |
| 20-30 | 12 | 2 | 33 | 47 | 31.3 |
| 31-40 | 21 | 11 | 11 | 43 | 28.7 |
| 41-50 | 12 | 23 | 2 | 37 | 24.7 |
| Greater than 50 | 5 | 14 | 4 | 23 | 25.3 |
| Literacy | | | | | |
| Illiterate | 48 | 43 | 43 | 134 | 89.3 |
| Literate* | 2 | 7 | 7 | 16 | 10.7 |
| Occupation | | | | | |
| Housewife | 50 | - | - | 50 | 33.3 |
| Farmer | - | 50 | 50 | 100 | 66.7 |

School attendance

Table 2 shows the percent of respondents who reported specific programmatic components as influential in promoting girls' school attendance. The majority of respondents mentioned the provision of school supplies as influential in keeping girls in school (88% of fathers, 92% of mothers and 60% of husbands). The next most commonly mentioned component was the economic incentive (44% of fathers, 52% of mothers and 36% of husbands). The third most common response was the mobilization of girls, which was mentioned by 38% of fathers, 28% of mothers and 48% of husbands.

Results

Profile of respondents

Nine individuals, three from each group - fathers, mothers and husbands - took part in in-depth interviews. The husband's group was generally younger than parent respondents who ranged from 30-60 years of age. The demographic profile of respondents for the rapid assessment survey appears in Table 1. The vast majority of male respondents were farmers, while females were housewives. Their age ranged from 20-71, and husbands were younger than other respondents.

Almost all respondents interviewed mentioned that girls' school attendance increased because of the school material supplied by the project. A mother respondent described:

'... my first daughter got married before the Berhane Hewan Program was established, but my other daughter continued her education with the support from the project. Even after she finished her education, I believe that, the project may help her in finding a job, which, in turn, will help the family.' (Mother, age 33, Housewife, illiterate)

Table 2: Intervention components contributing to the increase in school attendance by category of respondents

| Intervention Component | Fathers | | Mothers | | Husbands | | All |
|--------------------------------|---------|----|---------|----|----------|----|------|
| | n | % | n | % | n | % | % |
| Supply of school materials | 44 | 88 | 46 | 92 | 30 | 60 | 80.0 |
| Providing ewes to girls | 22 | 44 | 26 | 52 | 18 | 36 | 44.0 |
| Group meetings led by mentors | 19 | 38 | 14 | 28 | 24 | 48 | 38.0 |
| Community Conversation | 22 | 44 | 8 | 16 | 16 | 32 | 30.6 |
| Mentors house-to-house visits | 4 | 8 | 10 | 20 | 15 | 30 | 19.3 |
| Providing wells to communities | 8 | 16 | 4 | 8 | 9 | 18 | 14.0 |
| Household improvements | 5 | 10 | 3 | 6 | 11 | 22 | 12.6 |

Incentives like school material support were considered as motivating factors for families to send their daughters to school:

'... nowadays people prefer to have girls than boys because of their girls get school materials and these incentives helped girls to go to school and to delay early marriage.' (Husband, age 28, farmer, literate)

Although some mothers in the survey mentioned economic incentives, a mother underscored the importance of school material support for her daughters' continuation of participation in Berhane Hewan program, and its effect in increasing girls' confidence in continuing their education:

"My three children are members of Berhane Hewan and they get exercise books and pens. When they receive these materials, I keep them safely and give my children whenever the need arises. That way, they are put in good use." (Mother, age 50, house wife, illiterate)

Delayed marriage

The impact evaluation of the Berhane Hewan program showed a considerable reduction in marriage among girls aged 10-14 (6). However, the marriage of older adolescent girls seemed to accelerate after age 15, suggesting that the earliest marriages were deferred to later adolescence. In this study, when asked about program components that promoted delayed marriage, community conversations was mentioned most often by respondents (76% fathers, 66% mothers and 84% husbands) (Table 3).

Table 3: Intervention components contributing to the delay in early marriage by category of respondents (n=150)

| Intervention Component | Fathers | | Mothers | | Husbands | | All |
|--------------------------------|---------|----|---------|----|----------|----|------|
| | n | % | n | % | n | % | % |
| Community Conversation | 38 | 76 | 33 | 66 | 42 | 84 | 75.3 |
| Group meetings | 34 | 68 | 33 | 66 | 39 | 78 | 70.6 |
| Mentors house-to-house visits | 15 | 30 | 16 | 32 | 14 | 28 | 30.0 |
| Supply of school materials | 4 | 8 | 4 | 8 | 1 | 2 | 6.0 |
| Providing ewes to families | 2 | 4 | 1 | 2 | 3 | 6 | 4.0 |
| Household improvements | 3 | 6 | 1 | 2 | 2 | 4 | 4.0 |
| Providing wells to communities | - | - | 2 | 4 | 3 | 6 | 3.3 |

Group mobilization of girls was mentioned by 68% of fathers, 66% of mothers and 78% of husbands. Most in-depth interview participants mentioned that they were no longer supportive of the practice of early marriage as a result of the program:

'... some people think a girl should marry if she fails from grade 8 or 9, but I wouldn't do that. I will help her to engage in small trade. I learned the harmful effects of early marriage from the Berhane Hewan Program.' (Mother, age 30, housewife, illiterate)

The contribution of the Berhane Hewan Program in delaying early marriage was profound. Some respondents described that girls started challenging their parents' decisions about marriage:

'... previously, parents used to arrange marriage for their daughters, but nowadays, the girls are aware of the consequences of early marriage and they say no to it! Before the program, at least 15 arranged marriages occurred annually but after the project, there is no arranged marriage for very young girl in our community.' (Mother, age 50, housewife, illiterate)

Fathers, mothers and husbands interviewed indicated that the program engaged almost everyone in community conversations, with initial participants encouraging others to attend.

To this effect, people in the area have committed themselves in eliminating HTPs like FGM and early marriage.

'... in my view, after Berhane Hewan, harmful traditions are vanishing. Nowadays, girls in Mosebo are required by the Kebele administration to take a medical check-up before marriage to confirm if they are not below 18 years of age.' (Father, age 60, farmer and literate)

Participation of girls in Berhane Hewan unmarried girls club was mentioned as one of the most important factors in delaying early marriage; it was described by one of the respondents as follows:

'A woman asked her daughter to marry before she died. The girl refused and the father also tried to force her, but the girl continued to refuse because of information she got from the clubs'
(Husband, age 33, farmer, and illiterate)

Respondents described 'community conversations' as an effective tool in delaying marriage and keeping girls in school:

'... the knowledge we got from the conversations helped the community to understand the harmful effects of early marriage. Therefore, we understand the need for keeping our daughters in school.'
(Father, age 50, farmer and literate)

Increased family planning utilization

According to the impact evaluation study, increase in family planning utilization was one of the impact indicators that were observed during the pilot phase among Berhane Hewan program participants (6). Community conversation (85% fathers, 74% mothers and 76% husbands), group meetings by mentors (56% fathers, 52% mothers and 64% husbands), and house-to-house visits by mentors (48% fathers, 42% mothers and 44% husbands) were mentioned first, second and third, respectively as intervention components that brought about improvements in family planning knowledge and practice among Berhane Hewan program participants (Table 4).

Table 4: Intervention components contributing to the increase in family planning utilization by category of respondents (n=150)

| Intervention Component | Fathers | | Mothers | | Husbands | | All |
|--------------------------------|---------|----|---------|----|----------|----|------|
| | n | % | n | % | n | % | % |
| Community Conversation | 41 | 82 | 37 | 74 | 38 | 76 | 77.3 |
| Group meetings | 28 | 56 | 26 | 52 | 32 | 64 | 57.3 |
| Mentors house-to-house visits | 24 | 48 | 21 | 42 | 22 | 44 | 44.6 |
| Household improvements | 1 | 2 | 2 | 4 | 6 | 12 | 6.0 |
| Providing ewes to girls | 1 | 2 | - | - | 1 | 2 | 1.3 |
| Supply of school materials | 1 | 2 | - | - | - | - | 0.6 |
| Providing wells to communities | - | - | 1 | 2 | - | - | 0.6 |

Community conversation reportedly helped to create awareness about family planning. Fathers who sought to delay child birth described their circumstances:

'I have one daughter who is seven years old... after we started participating in community conversations; I didn't want to have another child for some time. The project provided us with injectable contraceptives and my wife has been using it since.' (Father: age 45, farmer and illiterate).

Husbands credit mentors, as major contributors in creating awareness about family planning and keeping girls at school:

'... If there is a problem in the family, mentors would try to handle it by discussing with parents. They also advise parents to use family planning, because if mothers give birth, the daughters have to abstain from school to help the family.' (Husband, age 38, farmer and literate)

Table 5 summarizes responses of study participants regarding influential intervention components associated with increased school attendance, delayed marriage and increased family planning use. The most commonly mentioned components are the supply of school materials, community conversation and group meetings led by mentors.

Table 5: Intervention components and their contribution to outcome indicators by respondents (n=150)

| Intervention component | Increase school attendance | | Delayed early marriage | | Increase in family planning use | | All* % |
|----------------------------|----------------------------|----------------|------------------------|----------------|---------------------------------|----------------|--------|
| | N | % (out of 150) | N | % (out of 150) | N | % (out of 150) | |
| Community Conversation | 46 | 31.0 | 113 | 75.0 | 116 | 77.0 | 61.1 |
| Group meetings | 57 | 38.0 | 106 | 71.0 | 86 | 57.0 | 55.3 |
| Mentors visits | 29 | 19.0 | 45 | 30.0 | 67 | 45.0 | 31.3 |
| Supply of school materials | 120 | 80.0 | 9 | 6.0 | 1 | 0.7 | 28.9 |
| Providing ewes | 66 | 44.0 | 6 | 4.0 | 1 | 0.7 | 16.2 |
| Household improvements | 24 | 16.0 | 6 | 4.0 | 9 | 6.0 | 8.6 |
| Providing wells | 21 | 14.0 | 5 | 3.3 | 1 | 0.7 | 6.0 |

*Interviewee responded to three sets of questions about outcome indicators.

Discussion

This rapid assessment indicated that community conversations, social mobilization by girl mentors and provision of school materials contributed to the increase in girls' school attendance and the increase in age of marriage of girls. Though this study examined the impact of the interventions in a specific population where the intervention was conducted, the impact may not be purely attributed to the Berhane Hewan intervention. Media and the global initiatives like the Millenium Development Goals could have also impacted the change. Established in 2004 as a pilot program, the Berhane Hewan Project has been supporting rural girls to stay in school and to delay the age of marriage by providing school material and through social mobilization and community awareness. The current rapid assessment used both qualitative and quantitative methods to identify the interventions that contributed towards increasing the age of marriage.

Community conversation: This intervention component when ranked by respondents as the most influential component in delaying the age of marriage and improving the utilization of family planning services. Community conversation was geared towards achieving abandonment of HTPs, particularly early marriage, FGM/C and marriage by abduction; motivate community members to use RH/family planning services, and finally convince parents to send their daughters to school. Community conversation also proved to be effective in decreasing HTPs in the SNNPR by other projects (2). This finding also suggested that this tool could be effectively used to transform communities to achieve better health and development in a cost effective manner.

Social mobilization: This intervention component consisted of group meetings led by mentors and house-to-house visits by mentors. In the overall analysis of intervention components, social mobilization was ranked second (55.3%). This approach has opened opportunities for adolescent girls to acquire the necessary skill and knowledge in RH and safe motherhood to overcome their social and health needs.

Mentoring has rarely been used as an intervention strategy in rural Ethiopia, but rural girls and families accepted it very well. It is a sustainable approach that can be integrated into the activities of health extension workers.

Supply of school materials: School material support was found to be an essential intervention component that helped parents to send their daughters to school, which otherwise may not have been possible. Questions about school materials specifically referred to the influence of these materials on increased school attendance, therefore, this data may not be appropriate for determining the relative importance of school materials compared to other components in regards to their impact on delaying marriage or increasing family planning use. As a result, this analysis may not provide an accurate reflection of the effectiveness of this particular component on delayed marriage.

Interventions such as community conversation and social mobilization along with school material support can be instrumental in efforts to increase school attendance for adolescent girls in the studied area and beyond.

In rural Ethiopia, where the primary school enrollment of rural girls is low, supporting girls' education is justified (7). Studies also suggest that educating girls is associated with increased age of marriage, decreased family size and increased child survival.

Community conversation, social mobilization and school material support can be used as major intervention components to replicate the Berhane Hewan program in other areas of the country. This rapid assessment showed several options that program planners can consider when choosing intervention components based on the availability of resources and effectiveness of the intervention. However, these preliminary findings can be strengthened through carefully monitored qualitative and quantitative studies in which various intervention models are implemented in different communities to identify the most cost-effective, efficient and scalable approaches.

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