Recruiting heterosexual couples from the general population for studies in rural South Africa – challenges and lessons (Project Accept, HPTN 043)

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To the Editor: Couples should be included in HIV prevention research, but their recruitment in southern Africa is challenging given high levels of migration and non-cohabitation. We describe the recruitment strategies and experiences of a pilot study in rural South Africa. With the aim of recruiting 20 couples at mobile voluntary counselling and testing (VCT) caravans and community venues, 75 index partners were screened with an average of 4 additional contacts required to schedule interviews. Recruiting and interviewing couples is feasible, but requires substantial resources.

Background

There is a growing consensus that HIV prevention research should address couples.[1] While couples VCT has been described as a 'high-leverage' prevention intervention for sub-Saharan Africa,[2] few couples-focused intervention studies have been conducted, and most of these have focused on HIV-discordant couples.[1,3] Recruitment of couples for research presents several challenges, including logistical difficulties, potential for partner coercion and selection bias.[4-6] Recruiting couples from the general population may be more challenging than recruiting discordant couples where the known HIV status of at least one partner offers an entry point and a motivator for partner consent. In KwaZulu-Natal, which has South Africa's highest prevalence of HIV,[7] couples-focused research has been inhibited by high levels of adult migration,[8] low cohabitation rates[9] and limited uptake of couples-based VCT in public health facilities.[10]

Methods

We report recruitment strategies and findings from a pilot study to examine the feasibility of recruiting heterosexual couples in Vulindlela, a rural area in KwaZulu-Natal. Couples were invited to participate in individual and couples interviews about their use and attitudes to reproductive and sexual health services. The study was conducted in partnership with Project Accept.[11] Ethics approval was obtained from the Human Sciences Research Council Research and the London School of Hygiene and Tropical Medicine.

Our target was to recruit 20 couples. Eligibility required both partners to be 18 - 45 years of age, and in a primary relationship with each other for at least 3 months. Ten couples were sought through Project Accept mobile community-based VCT caravans and 10 couples from the community more generally. At the mobile caravans, information flyers were given to all individuals who received VCT. Interested individuals were referred to a recruiter/interviewer for screening. If a study recruiter was not available, the mobile team recorded contact information from interested individuals who were later phoned for screening. Mobile phone ownership is high in South Africa, and all index individuals provided their phone number. Community recruitment focused on markets, churches, workplaces and bus and taxi stands, and community centres with interviewers/recruiters approaching individuals or couples to introduce the study; a few couples were introduced by participants already enrolled. Posters were displayed giving details of the study and a phone number to call for additional information.

Irrespective of the recruitment location, initial contact was typically with only one of the partners, to whom a follow-up call was made to provisionally confirm whether their partner was also interested in participating. Appointments for individual and couple interviews were arranged for the same day. Each partner was first interviewed separately to verify eligibility criteria, minimise partner coercion in participation and facilitate discussion of sensitive topics. Thereafter, couples were interviewed together.

Results

To achieve our target of interviewing 20 couples we screened more than three times the number of index individuals (N=75). The median age of index individuals was 25 years (interquartile range (IQR) 21 - 32). Of the couples screened, both partners met the age criteria in 71 (94.7%) couples; the median relationship duration in these cases was 3 years (IQR 1.5 - 6). For 45 (60%) index individuals the initial screening was done in person. However, only 6 (8%) partners were also present and available for immediate screening. After initial screening and recruitment, considerable effort was required to complete the study interviews. A median of 4 additional contacts were made after screening (IQR 2 - 5), with 74% of all contacts made by phone. The number of pre-interview contacts was not significantly different according to study outcome or recruitment strategy. We completed individual and couple interviews with 24 couples (32%) (Table I); 4 were already scheduled when our target was reached. Overall, 25% of partners refused to participate when the study was explained to them by the index individual, with 60% of partners refusing when the index was female and recruited in the community. For a further 16 (21%) couples either the index person or their partner refused to participate despite both initially confirming their interest.

Participant profiles differed according to recruitment location, with individuals recruited through the mobile units more likely to be living with their partner (28% v. 12%) and more likely to be male (72% v. 55%) than those recruited in the community. However, the differences were not statistically significant (p=0.11 and p=0.13, respectively). The low proportion of cohabitation in the screened sample is consistent with other studies in similar communities[9] and suggests that neither recruitment strategy biased towards cohabiting couples. Recruitment through mobile VCT was a better environment for recruiting men as index individuals.[12] Recruitment in the

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Table I. Final study outcome for each couple screened, according to recruitment strategy and gender of the index individual (*N* (%))

	Community		Mobile unit		
Outcome of recruitment	Male (*N*=19)	Female (*N*=15)	Male (*N*=27)	Female (*N*=11)	Total (*N*=75)
Partner refuses to participate	2 (11)	9 (60)	5 (19)	3 (27)	19 (25)
Index withdraws	5 (26)	3 (20)	4 (15)	2 (18)	14 (19)
Partner withdraws	1 (5)	1 (7)	-	-	2 (3)
Relationship ends	-		1 (4)	1 (9)	2 (3)
Participant did not attend appointment*	-		2 (7)	-	2 (3)
Unable to contact	-	1 (7)	5 (19)	-	7[§] (9)
All interviews completed	10 (53)	1 (7)	9 (33)	3 (27)	24[§] (32)
Index interview complete[†]	-			1 (9)	1 (1)
Ineligible[‡]	1 (5)		1 (4)	1 (9)	4[§] (5)

*For one couple, the index individual died after being sick during repeated phone contacts; for the second couple, the index individual started work and moved away.

†The index individual was interviewed but the index's partner had to withdraw due to illness.

‡Two couples were excluded because the index's partner did not meet the eligibility criteria; one had no primary partner; and one index individual was too young to join the study.

§Three additional couples were recruited by referral. One was ineligible for the study, one could not be contacted, and one was successfully interviewed.

community provided a more gender-balanced recruitment of index individuals, but completion of the study was significantly more likely when the index partner was male. Passive recruitment from posters was unsuccessful; no calls were received prompted solely by posters.

Discussion

Our pilot study shows that it is possible to recruit and interview couples in rural South Africa despite the high levels of migration and non-cohabitation. In designing our recruitment strategies we drew on the recommendations of published couples studies[4-6] and the experience of Project Accept in community engagement. Different approaches to recruitment have been suggested. McMahon et al. advocate targeting female partners first so that they can decline participation without pressure from male partners,[4] whereas Pappas-DeLuca et al. recommend recruiting both partners simultaneously, but providing an opportunity for female partners to opt out privately during screening.[5] In our study, simultaneous recruitment was not an option because couples rarely presented at the mobile units or were readily identifiable at community venues. We adopted other recommended approaches to enhance recruitment, including couple verification screening, male and female recruiters/interviewers, obtaining referrals from recruited couples, and providing 'take-home' materials. Despite the care taken to maximise recruitment, recruiting just 20 couples required a substantial investment of time and resources. Nonetheless, the results of this preparatory study are encouraging. Given the need to identify effective HIV behavioural interventions in South Africa, we believe that couples-focused studies and interventions can be one possible component in efforts to promote testing and reduce HIV transmission.

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