Evaluating the effectiveness of enhanced family planning education on knowledge and use of family planning in fishing communities of Lake Victoria in Uganda: a randomized controlled trial.

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BACKGROUND

Family planning knowledge is poor and use is low in Ugandan fishing communities. We compared the effectiveness of enhanced family planning (FP) education with routine counselling on FP knowledge and use.

METHODS

Individuals aged 15-49 years were randomly assigned to intervention or control arm. The intervention constituted enhanced FP education based on a simplified handout extracted from the WHO FP guidance tool called, "Family planning: A global handbook for FP providers" which participants took home for additional reading. The control arm constituted FP counselling following Uganda Ministry of Health guidelines. FP knowledge score and contraceptive prevalence rate (CPR) were compared between trial arms at baseline and at 12 months. Negative binomial regression models were used to estimate the effect of the intervention on FP knowledge and use.



FP education using a simplified FP handout Is more effective in increasing FP knowledge and improving FP use than routine FP counselling for people residing in fishing communities.

RESULTS

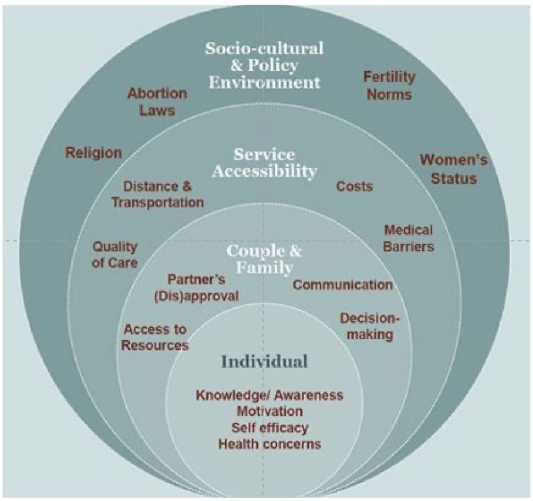
Overall, 1410 participants were screened to enrol 1,004 (502 per study arm, 48.5% women). Subsequently, 384 (76.5%) and 383 (76.3%) completed the 12 months' follow-up in the intervention and control arms respectively. At baseline, a median FP knowledge score of 8 and a <70% FP knowledge score was observed for all participants with a CPR of 36.8%. At month-12, the median FP knowledge score improved in both arms, higher in the intervention arm than the control arm (46 vs 30; p<0.001). In the intervention arm, 304 (79.2%) had a score of ≥70 compared with 21 (5.5%) in the control arm (p<0.001). In the negative binomial regression model, the change in FP knowledge score was 47% higher in the intervention arm than in the control arm (score ratio: 1.47, 95%CI: 1. 43-1.51, p<0.001). The change in CPR was 16% higher in the intervention arm than in the control arm (Prevalence ratio: 1.16, 95%CI: 1.01-1.34, p<0.040).

Study arm	Adjusted Coefficient	95%CI	p -value	Adjusted SR /PR	95%CI	p -value
Intervention*	0.39	0.36 - 0.41	<0.001	1.47†	1.43 - 1.51	<0.001
Intervention**	0.15	0.06 - 0.29	0.040	1.16 ††	1.01 - 1.34	0.040

CONCLUSIONS

Enhanced FP education using a simplified FP education handout was more effective in increasing FP knowledge and use compared to routine FP counselling for people living in fishing communities. Innovative FP education interventions are recommended for improving FP knowledge and optimizing uptake in remote-rural settings where literacy levels are low.

DETERMINANTS OF FP USE



AFFILIATIONS:

1. UVRI-IAVI HIV Vaccine Program, Uganda
2. Makerere University College of Health Sciences, School of Public Health, Uganda
3. MRC/UVRI & LSHTM Uganda Research Unit, Uganda
4. Uganda Virus Research Institute, Uganda
5. International AIDS Vaccine Initiative, USA
6. Global Health Institute, University of Antwerp, Belgium

IAVI gratefully acknowledges the generous support provided by the following major funders:

And Many more other generous individuals and Partners around the world as of November 2022