Do sexual and reproductive health interventions improve adolescent health service

utilization? A case study of Kassena Nankana Districts of Northern Ghana

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Many adolescents are at risk of sexually transmitted infections (STIs) including HIV/AIDS, unintended pregnancies and unsafe abortions. However, uptake of reproductive health services to mitigate these effects is low. This study assesses the association between provision of a sexual and reproductive health (SRH) intervention and adolescent health service utilization in the Kassena Nankana Districts.

The study uses data from a three year project that tested a package of interventions (community mobilization and sensitization, youth friendly health services, school-based SRH education and peer outreach) addressing the SRH needs of adolescents. In order to measure the impact of the project 2,664 adolescents were interviewed in a before and after survey between 2005 and 2008. Data was collected using structured questionnaires. Intervention and control participants were compared.

The results showed that SRH interventions have significantly improved health service usage among adolescents in the intervention arm than in the control arm. Participants in intervention arm were two times more likely to use STI/HIV/AIDS services (OR 2.23; 95% CI 1.73-2.86), 84% greater odds of utilising perinatal services (OR 1.84; 95% CI1.42-2.39), and 51% greater odds of using antenatal services (adjusted OR 1.51; 95%CI 1.12-2.02) than those in the control group. Participants in the intervention arm reported slightly greater overall service satisfaction, but were about 99% less likely to use HIV counseling and testing services (AOR: 1.05; 95% CI (0.82-1.33).

A package of interventions implemented together improves access to health services among adolescents. The study informs policy makers about comprehensive interventions more likely to encourage greater SRH service utilisation among adolescents in developing countries.

**Tables** 

Table 1 Frequency of demographic characteristics, comparing exposed to unexposed adolescents, disaggregated by gender

Variable		Exposed			Unexposed			
	Female	<b>Male</b> (769)	<b>AII</b> (1288)	<b>Female</b> (576)	<b>Male</b> (800)	<b>AII</b> (1376)	(compares 'All' columns)	
	(520)							
Age ( Mean)	19.0	19.1	19.1	18.9	19.0	19.0	1.07 (1.00-1.15)	
Education (%)								
Primary	16.9	29.3	24.3	18.9	30.6	25.8	1.46 (0.97-2.20)	
Junior High School	49.1	45.4	46.89	51.6	48.0	49.6	1.46 (0.99-2.17)	
Senior High School	28.3	20.2	25.47	23.3	16.0	19.39	2.03 (1.35-3.07)	
None	4.0	3.0	3.34	5.4	5.0	5.17	1	
Religion (%)								
Catholic	53.0	41.2	45.96	64.9	47.56	54.80	0.77 (0.54-1.11)	
Other Christian	28.13	29.52	28.96	29.22	27.41	28.17	0.95 (0.65-1.38)	
Muslim	13.10	10.01	11.26	1.74	5.51	3.93	2.64 (1.66-4.22)	
Traditional	0.39	10.79	6.60	1.22	11.26	7.06	0.86 (0.55-1.36)	
No religion	1.93	7.02	4.97	1.39	6.88	4.59	1.43 (0.73-2.78)	

Marital Status (%)							
Married	82.6	55	51.2	60.4	32.0	75.2	1.18 (0.97-1.43)
Not married	17.4	45.0	48.8	39.6	67.95	24.8	1
Living Arrangements (%)							
Living with both parents	50.5	44.7	53.3	56.9	66.0	62.21	0.69 (0.60-0.81)
Not living with both parents	49.5	55.27	46.7	43.1	34.0	37.8	1

Table 2. Percentage distribution of SRH service usage, satisfaction, and suggested improvements, comparing intervention to control area adolescents, disaggregated by sex

Variables	Exposed			Unexposed			OR (95%CI)
	Female	Male	AII	Female	Male	AII	(compares 'All' columns)
a) Service usage (%)							
STI/HIV/AIDS services	14.9	17.8	16.6	8.2	7.8	7.8	2.23 (1.73-2.86)
HIV counselling and testing services	11.6	13.9	13.0	9.8	12.7	11.5	1.09 (0.86-1.38)
Antenatal services	19.5	7.5	12.4	13.1	4.8	8.3	1.57 (1.20-2.05)
Maternity services	18.2	13.3	15.3	12.9	5.8	8.8	1.85 (1.44-2.38)
b) Satisfaction with services (%)	88.7	93.3	91.2	87.8	90.1	89.04	1.19 (0.78-1.81)
c) Service improvement suggestions (%)							
Drugs available	60.0	63.6	61.5	57.1	36.8	47.5	0.67 (0.33-1.37)
Friendly staff	16.7	9.1	13.5	23.8	21.03	22.5	0.58 (0.21-1.58)
Short waiting time	16.7	18.1	17.3	20.0	0.0	9.8	1.55 (0.40-6.04)

Privacy	13.3	9.1	11.5	9.2	10.5	10	1.14 (0.33-3.91)
Convenient hours	3.33	9.1	5.8	14.3	15.8	15	0.23 (0.54-0.94)
Confidentiality	10.0	4.6	7.7	4.8	5.3	5.0	1.81 (0.36-9.10)
Same sex providers	0.0	0.0	0.0	4.76	5.3	5.0	-