



HUMAN-CENTERED DESIGN FOR SEXUAL AND REPRODUCTIVE HEALTH IN RURAL MOZAMBIQUE

A MIXED METHODS EVALUATION

EXECUTIVE SUMMARY

Background: Vale a Pena (VAP) is an initiative to generate demand for sexual and reproductive health (SRH) services. Interventions were developed with rural adolescents in two provinces of Mozambique using a human-centered design (HCD) process that centered the voices and experiences of adolescents. A mixed methods endline evaluation was conducted to examine associations between exposure to VAP and differences in SRH knowledge, attitudes, and behaviors using a quantitative survey and qualitative interviews.

Key Findings:

- Exposure to VAP was associated with increased family planning use and higher levels of SRH knowledge and attitudes for adolescent girls and key influencers.
- Qualitative narratives indicated direct attribution of change in key outcomes to the VAP program.

Conclusion: Designing with adolescent girls and centering their experiences were key for generating context-specific insights so that the resulting tools were relevant and appropriate. The VAP tools are particularly useful for reaching rural audiences, who are often underserved by SRH programming. VAP is ideally positioned for scale-up to additional settings where rural adolescents could benefit from demand generation for SRH services.

INTRODUCTION

Adolescent pregnancy is a significant public health concern in Mozambique, and barriers to accessing sexual and reproductive health (SRH) services persist. Marriage during adolescence is common, with 49% of girls married by age 18.¹ Almost half (46%) of girls ages 15-19 have ever been pregnant, and unmet need for contraception among adolescents is high compared to unmet need among older women.¹ The National Health Service in Mozambique has a youth-friendly services initiative, but youth report that providers are rarely youth friendly and sometimes refuse to provide contraception to girls who have never had a child. Youth also report concerns about confidentiality, stigma, and costs when seeking SRH services.

Program Approach

Vale a Pena (VAP) was designed to increase demand for SRH services through interventions to change social behaviors and beliefs in Mozambique. VAP used a human-centered design (HCD) process that centered the voices and experiences of adolescents. HCD is an on-going, reflexive process of co-creation and continuous engagement with end users. VAP was developed in partnership with adolescents and their key influencers and reflects a deep understanding of the project's target consumers. The HCD process unlocked creativity during the design and adaptive implementation phases that would not have occurred in a traditional approach to developing an SRH intervention.

Intervention Components

The HCD process resulted in demand creation tools that were primarily delivered through one-to-one or community channels. Community health promoters delivered door-to-door counseling on SRH topics directly to adolescents using video testimonials and other counseling tools. Activities implemented through community-based channels were community dialogues with key influencers and mini-events on SRH topics for adolescents. VAP also supported clinic-based and mobile SRH services delivered by nurses who were trained to provide adolescent-friendly SRH counseling and services and interfaced with community health promoters. VAP activities were implemented from March 2019 to February 2021.

Setting

VAP was developed and implemented in 12 rural districts in two provinces. In Nampula, the country's most populous province, 58% of residents are in the lower 2 wealth quintiles and 61% of girls ages 15 to 19 have already given birth.¹ Gaza is a smaller and wealthier province, with only 7% in the lower wealth quintiles, yet adolescent pregnancy is common, with 41% girls ages 15 to 19 having given birth.¹



RESEARCH OBJECTIVES

A mixed methods endline evaluation was designed to examine how the VAP package of tools was associated with SRH knowledge, attitudes, and practices for rural adolescent girls and their key influencers. Research objectives were (1) to compare endline outcomes for VAP-exposed individuals to outcomes for comparison groups using survey data from VAP and non-VAP areas; and (2) to examine the attribution of changes to VAP using a Qualitative Impact Assessment Protocol (QulP) through analysis of in-depth interviews with program participants.

METHODOLOGY

Study Population

All data were collected in January and February 2021. Adolescent girls ages 15 to 19 were sampled from non-VAP areas (n = 1,169) and within VAP areas by exposure to VAP programming (n = 760 exposed and n = 1,040 unexposed). Key influencers were sampled from VAP areas and included partners, parents, parents-in-law, health providers, and community leaders, sampled by exposure to VAP programming (n = 845 exposed and n = 721 unexposed). Interviewers went door-to-door to identify eligible participants, with no more than one adolescent and key influencer sampled from each household. The overall response rate of those who were approached was 97%. Survey responses were collected electronically, with quality control and monitoring of fieldwork conducted remotely. Selection of key outcomes was guided by a

predetermined log frame. Outcomes included adolescents' SRH knowledge, attitudes and practices, and two measures of key influencers' SRH attitudes.

Quantitative Analysis

Outcomes were compared between those in non-VAP areas, those exposed to VAP, and those in VAP areas but not exposed. To control for differences between groups in socioeconomic and demographic variables, logistic regression models for each outcome were adjusted for province, socioeconomic status, education, age, and marital status.

Qualitative Methods

An independent research team that was not involved in implementation conducted the qualitative component of the evaluation using a Qualitative Impact Assessment Protocol (QulP). QulP is an approach by which program impact is attributed through analyses of narrative accounts of change.² Data were collected through in-depth interviews with 32 adolescent girls and 26 key influencers who were exposed to VAP. Narrative accounts of change were coded by topic and with criteria to identify positive change with direct attribution to VAP, positive change with no direct attribution, or no evidence of change.

Ethical Considerations

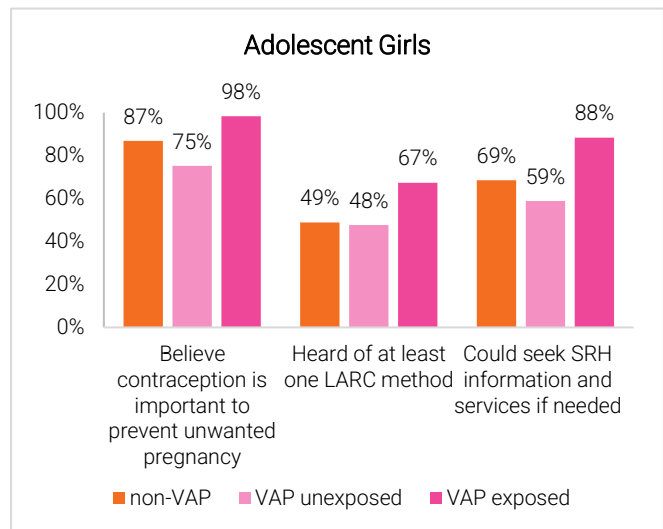
Ethical approval was granted by the Comité Nacional de Bioética para Saúde and informed consent was obtained from all participants. Before fieldwork started, COVID-19 mitigation measures were reviewed by the PSI COVID-19 fieldwork authorization committee. Protective measures (including use of masks, alcohol, social distancing, screening for symptoms and temperature checks) were used by field teams, and no cases of COVID-19 were reported among the field teams during or after the fieldwork period.

KEY FINDINGS

Demographic characteristics of adolescent girls in the quantitative sample differed between the two provinces but were relatively similar within each province in VAP and non-VAP areas. Key influencers were partners (19%), parents or parents-in-law (50%), health providers (17%), and community leaders (14%).

Adolescent Girls

SRH knowledge and attitudes were high among VAP-exposed adolescent girls, with 98% believing that contraception is important to prevent unwanted pregnancy, 67% having heard of at least one long-acting reversible contraceptive (LARC) method, and 88% indicating that they could seek SRH information and services if needed. Among those who were exposed to VAP, 51% of sexually active adolescent girls reported ever use of contraception. Knowledge, attitudes, and contraceptive use were significantly higher in the VAP-exposed group compared to both comparison groups, even after adjusting statistically for differences in demographic characteristics (*P*-values range from .006 to < .001).



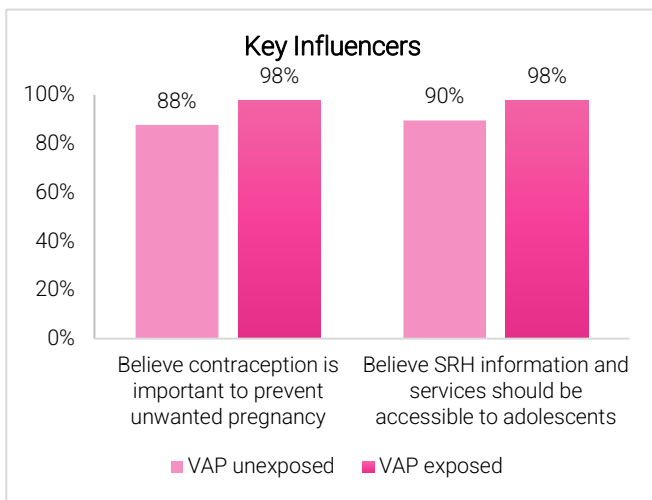
"It changed for me because when I go to the nurse's house or meet her at the hospital if she is available to talk to me, I feel freer and more comfortable to speak and clarify my doubts" – Adolescent girl

"I think it changed because in the past we had sex with men anyway, without a condom, but now, after the promoters started to visit the community talking to us, they talked about condoms and we saw that it would help. Whenever we went to the health center, we asked for condoms and [they] gave them to us. So now it has changed a lot..."
 –Adolescent girl

"It was with my sister-in-law that I decided to have an implant. ... It is good to have an implant so that we can continue to study." –Adolescent girl

Key Influencers

For key influencers, endorsement of positive SRH attitudes was nearly universal (98%) among those exposed to VAP and significantly higher than endorsement by those not exposed after adjusting for demographic characteristics (P -values < .001).



"The ability to speak [about family planning] has changed through this training ... in the past, I was unable to talk about family planning but [now] I can speak little by little. Even if I can't reach the end ... at least I can reach the path." –Key influencer

"The attitude [about family planning] of the girls who live with their parents has changed a lot. It is not as it was before." –Key influencer

Qualitative Attribution of Change to VAP

Analysis of narrative interviews with adolescent girls indicated a pattern of positive change for all indicators. Girls attributed these changes to VAP

for many indicators. Specifically, evidence of attribution was seen for the various types of knowledge, knowledge exchange, access to information, and access to and uptake of SRH products and services. For key influencers, evidence was also strong for the attribution of change to VAP programming, particularly in Nampula province.

CONCLUSIONS

This endline evaluation integrated quantitative assessment of SRH outcomes with qualitative evidence of changes that were attributed to VAP. Findings from these complementary research methods support the use of HCD and adaptive implementation approaches for SRH programs. The HCD process was particularly valuable for centering the experiences of adolescent girls, generating context-specific insights, and co-creating with target audiences so that the resulting tools were relevant and appropriate. Evaluations of future VAP adaptations or scale-up can provide opportunities to explore the effectiveness of individual program components, which was beyond the scope of this evaluation. The VAP tools are particularly useful for reaching rural audiences, who are often underserved by SRH programming. These tools could be integrated into existing SRH programming to expand reach to rural audiences or adapted using the HCD process to reach different audiences. VAP is ideally positioned for scale up or adaptation in settings where adolescents could benefit from demand generation for SRH services.

REFERENCES

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ABOUT PSI

Founded over 50 years ago, Population Services International (PSI) is a global nonprofit that makes it easier for people to live healthy lives and plan the families they desire. PSI brings innovation to scale through presence in over 40 countries and a vast network of global, regional, national, and provincial partners. With an unwavering commitment to the healthcare consumer, PSI designs effective and sustainable solutions to the world's biggest healthcare challenges.

STRATEGIC EVIDENCE AGENDA

PSI developed a framework of questions to build the evidence around consumer-powered healthcare. This brief address the Strategic Evidence Agenda topic of client experience.

OUR PARTNERS

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