Assessing the Quality and Effects of GBV Clinical Services in Rural Zambézia Province, Mozambique

Evaluation Report

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Abstract

Background: Gender-based violence (GBV), including physical, psychological, and sexual assault, represent a significant public health issue. In Zambézia province, Mozambique, the "one-stop" care model was first initiated in 2015, offering integrated GBV-related services and coordinated care at single service delivery points within health facilities, but low numbers of people seeking care have limited the ability to assess the impact of one stop care models on health outcomes among GBV survivors.

Methods: In January 2017, we initiated a services enhancement campaign to increase the number of GBV survivors seeking care at the health facility. We conducted theater presentations and lectures to educate community members about the importance of seeking immediate care for GBV and provided a four-day training to service providers (followed up with consistent clinical mentoring) to reinforce GBV care. We also introduced a home-based care intervention to follow-up patients who did not return for counseling, post-exposure prophylaxis (PEP), and/or repeat HIV testing. We compared pre- vs. post-intervention patient characteristics using Pearson and Student's t-tests. We employed a negative binomial model to assess change in rate of seeking care.

Results: Between July 2016 - April 2019, we evaluated 1,806 GBV incidents at 15 health facilities. Patients were primarily female (89%); with the median age (IQR) varied by type of GBV reported (physical, 26 [21-32]; psychological, 19 [17-24]; sexual, 11 [5-15]). Physical violence was reported in the majority of cases (76%), psychological violence (4%), and sexual assault in 20%. Patterns of care seeking behavior increased from 0.14 to 0.19 events per day (RR 1.35 [CI: 1.19-1.53]); $p<0.01$) (adjusted analysis) driven entirely by improvements in services offered in rural facilities. There was no significant change in registration of sexual assault events within 72 hours. Among those eligible for PEP in the post-intervention period, 94% initiated PEP (vs. 93% pre-intervention; $p=0.70$). Uptake of repeat HIV testing improved significantly with 48% (vs. 14% pre-intervention), 42% (vs. 8% pre-intervention), and 31% (vs. 5% pre-intervention) undergoing repeat HIV testing at 1-, 3- and 6-months post-incident, respectively.

Conclusion: Our increased rate of GBV event reporting was limited to rural areas, but even here we did not find any improvement in the registration of sexual assault events within 72 hours. Services enhancement campaign activities did lead to in increased rates of HIV re-testing among sexual assault survivors who initiated PEP.

Background

Sexual assault, a form of gender-based violence (GBV), is a worldwide public health concern that places survivors at risk of unplanned pregnancies, psychological morbidities, and sexually transmitted infections (STI) including but not limited to human immunodeficiency virus (HIV).[1] Girls who are sexually assaulted are roughly three times more likely than their peers to experience an unwanted pregnancy, incident HIV infection, or an additional STI.[2] This risk may be increased by behavioral, biological, and/or immunological factors such as male medical circumcision and/or the presence of concomitant genital ulcer disease [3], and by factors associated with sexual assault itself such as genital trauma, exposure to other STIs, and attack by multiple assailants.[4] Rates of sexual assault vary by region, but high rates of sexual assault have been reported in countries with high HIV prevalence. The U.S. Centers for Disease Control and Prevention (CDC) conducted National Violence Against Children Surveys in Swaziland, Tanzania and Zimbabwe and found that women (18-24 years of age) reported high rates of sexual assault: 44%, 29%, and 41%, respectively.[2]

According to Mozambique's 2015 Immunization, Malaria and HIV/AIDS Indicator Survey (IMASIDA), 6% of Mozambican women between 18 and 49 years of age reported having been forced to have sexual relations against their will at some time during their lifetime, with 3% reporting that they were forced to have sex in the prior 12 months.[5, 6] Among age-matched women in Zambézia Province, even higher rates of being forced to have sexual relations at some point in their lifetime (11%) as well as being forced to have sexual intercourse in the prior 12 months (9%) have been reported..[5, 6] For Mozambican males 18-49 years of age, reported rates were 6% and 2%, respectively, in 2015, with higher rates among Zambézian men in this age group at 11% and 7%, respectively.[5, 6] Among Mozambican women 18–49 years of age who were married or with a partner in 2015, 19% reported experiencing physical or sexual violence perpetrated by their spouse at some time in the prior 12 months. The rate was 7% for age-matched males during this same period of study.[5, 6]

According to the Mozambique 2015 IMASIDA, 53% of Mozambican women who suffered sexual violence never asked for help or told anyone compared to 41% of women who suffered physical violence.[5, 6] Among men, rates of non-disclosure were 44% for sexual violence and 31% for physical violence.[5, 6] IMASIDA data indicates that non-disclosure rates are high in rural areas. For example, in Zambézia province, non-disclosure rates were as high as 43% for females and 30% for males experiencing either physical or sexual violence.[5, 6] Despite recent service enhancement campaigns and programming aimed at discouraging these types of violence, such high rates of non-disclosure suggest that many GBV survivors in Mozambique, and specifically Zambézia province, experience significant barriers to reporting violence.

Low adherence to post-exposure prophylaxis (PEP) is a significant concern as it is associated with a risk of reduced efficacy and increased resistance to combination antiretroviral therapy (ART). In a qualitative study [7] involving in-depth interviews with 29 women attending sexual assault services in South Africa, only nine (31%) women were able to complete their prescribed PEP regimens. A recent multi-country systematic review [8] confirmed an overall low rate of adherence to PEP among survivors of sexual assault with considerable variation in rates of adherence and attrition from longitudinal care across an array of settings. This evidence suggests the importance of ensuring better case management and follow-up care by the health care system

(and extension partners) for survivors of GBV, especially post-sexual assault survivors that were prescribed PEP.

A 2012 systematic review and meta-analysis showed an overall proportion of patients defaulting from care was 41%, with 40% PEP adherence across 23 cohorts.

Data on adherence to PEP among sexual assault survivors in Mozambique are greatly lacking.

Enhancements to the GBV Initiative (GBV-I) program which were implemented in the 15 districts supported by FGH at the time included:

1. Community sensitization activities included the following:
    a. GBV and PEP trainings offered to increased number of community leaders and people of influence in all target district sites, training on the use of a nationally approved community-clinic GBV referral form (currently used by traditional healers), provision of sufficient referral forms, and technical support in its use; (**NOTE**: Health care facilities were prepared for the possible increase in the number of GBV cases being reported);
    b. Encouraged continuation of or initiation of regular monthly or quarterly multi-sectorial meetings involving key individuals and/or GBV focal point persons from each stakeholder sector (including clinicians, psychologists/psychiatrists, forensic clinician (if available), as well as representatives from the police, legal, and civil service sectors);
    c. Community panel discussions and radio spots with representatives and messaging from health, legal, police, and civil service sectors experienced with GBV, with time dedicated for open question and answer sessions allowing community members to ask questions about GBV and PEP.

2. System strengthening and improved follow-up activities (in an effort to accurately assess rates of PEP uptake, PEP completion, and seroconversion):
    a. Encouraged continued expansion of “one stop model” care for GBV survivors seeking care at health facilities per Mozambique’s Ministry of Health (MoH) recommendations;
    b. Provided training to GBV team members in proper completion of the *Ficha de Notificação de Casos de Violência* (Notification Form of Violence Cases, Appendices 8a and 8b), *Ficha de Registro de PPE* (PEP Recording Form, Appendices 9a and 9b), and *Ficha de Seguimento das Visitas Domiciliares* (Follow-up Home Visiting Recording Form, Appendices 11a and 11b);
    c. Specific GBV and safety training for community health workers (CHWs) employed by FGH or SDSMAS in conducting sensitive, effective, safe, and confidential home visits to victims of sexual assault (see Appendix 12);
    d. Implemented standard-of-care follow-up via novel home visiting services for PEP patients who did not to return to the clinic for follow-up, and for those who abandoned care, in line with the MoH current policy on PEP patients, only where consent/assent had been given by the patient or their parent/guardian if a minor (collected at their initial visit to health facility). Specially trained CHWs provided:
        i. Home-based PEP adherence checks at one-month post-incident, and
        ii. Home-based counseling and HIV testing at 1, 3, and 6 months post-incident.

We proposed this evaluation to assess GBV services and patient outcomes with regard to the effect of GBV-I programming with our program enhancements detailed above. We reviewed patient medical records and program tracking data to: (1) assess patient uptake of facility-based GBV-related clinical services during both pre- and post-GBV-I enhancement periods; and (2) assess potentially HIV-exposed GBV patients' uptake of and adherence to PEP and follow-up HIV testing. We also proposed to (3) implement a short questionnaire to determine factors that may influence uptake of and adherence to GBV services, including PEP, in order to inform future GBV programming. Our evaluation used routinely collected GBV program data to evaluate outcomes after our proposed enhancements were implemented.

Purpose and questions

The goal of this evaluation was to better understand the delivery of the GBV clinical services described above, our patients' use of and adherence to PEP for HIV prevention following a GBV-related exposure, and the effect of enhanced training, tools, and follow-up care in order to improve our GBV program.

The objectives of this specific evaluation were:

1) To assess the number of GBV (physical, emotional, or sexual violence) patients self-reporting or being referred to health facilities, and patient uptake of facility-based GBV-related clinical services during both pre- and post-enhancements periods to the GBV-I activities.

2) To assess eligible sexual assault survivors' uptake of and adherence to PEP and HIV testing during both pre- and post-implementation periods of home-based follow-up visits.

3) To describe the subpopulations among our supported patients that are most likely to uptake, and adhere to, GBV-related clinical services, including PEP, in efforts to better identify our patient populations that may require additional adherence counseling or more active follow-up.

Design/methods/limitations

Overall evaluation design

This outcome evaluation used a quasi-experimental study design, with a pre-post analysis.

For the first two objectives, pre-post analyses of clinical records were done to assess the uptake of standard GBV-I services and programming and were compared to service uptake with enhanced GBV-I activities as described above. Retrospective data collected from clinical charts, documentation forms, and monthly program reports were utilized.

For Objective 3, a short questionnaire was done among with eligible patients reporting sexual assault to help understand potential barriers they may have experienced impacting their ability to remain engaged in longitudinal GBV care or adhere to PEP, follow-up consultations, and undergo repeat HIV testing.

Stakeholder engagement

Various project staff from the Ministry of Health (MoH) and FGH/VUMC were involved in this activity. From the MoH, this included the gender-based violence (GBV) focal points at the Ministry of Health (Maputo) and the Provincial Health Directorate of Zambézia (DPS-Z). Both have been involved in the monitoring of the evaluation implementation and discussion of evaluation results. From CDC Mozambique, the Project Officer has been involved since the beginning of the evaluation. At FGH, the GBV Focal Point and the Maternal and Child Health (MCH) Advisor (who supervises support to GBV program implementation) have been involved since the design of the evaluation, to ensure alignment of the implementation of the GBV-initiative with the evaluation activities.

At health facility level, managers and GBV focal points were involved during the trainings and throughout implementation of the evaluation, ensuring coordination of the implementation activities and to be able to receive input and/or provide support as needed.

Preliminary results were discussed at stakeholder meetings at provincial level in 2018, and same was done for final results at national and provincial levels in 2019.

Sampling strategy

Activities related to Objectives 1 and 2 involved the use of routinely collected data for all care provided to and clinical outcomes for GBV survivors seeking care at the selected clinical sites. Historical control (baseline) data were retrieved from patients seen at these sites in the pre-enhancement phase, and post-enhancement patient data were collected for all GBV survivors treated and followed prospectively throughout the remaining months of this evaluation period.

For the GBV enhancement activities related to Objective 2, health staff explained to eligible persons the option of home visits for follow-up PEP and HIV monitoring if the patient did not return to clinic at recommended times. Eligible patients, or their parents/guardians if the patient was a minor, were asked to give informed consent and/or assent for as needed home visits.

For Objective 3, all adult ($\geq$18 years of age) and adolescent (15-17 years of age) female sexual assault survivors receiving post-incident care at one of the fifteen target health facilities were eligible for participation in the questionnaire. In a private room, and after immediate medical needs and procedures were attended to, the patient, and their parent/guardian if patient was a non-emancipated adolescent, was explained the purpose of the questionnaire. Informed consent/assent was obtained from all participants, and their parent/guardian in the case of non-emancipated adolescents, either marked by their signature or using their fingerprint, whichever they preferred, before any data collection. They were informed they were allowed to refuse to respond at any question. The patient was then asked the five questions from the questionnaire.

Data collection methods

The evaluation was initially done in 10 health facilities supported by FGH (in the districts of Alto Molócuè, Chinde, Gilé, Ile, Inhassunge, Maganja da Costa, Mopeia, Morrumbala, Namacurra and Pebane). As of October 2017, the evaluation project was terminated in the districts of Chinde, Mopeia and Morrumbala (because of discontinuation of FGH support in those districts) and five health facilities in Quelimane District were added (17 de Setembro, 24 de Julho, Chabeco, Coalane and the Quelimane Provincial Hospital).

The table below shows the data collection methods used per objective.

Table 1. Data collection methods

	Objective 1	**Objective 2**	**Objective 3**
Age	All ages	All ages	15 – 45 years of age
Sex	Female and male	Female and male	Female
Type of GBV	All types	Sexual	Sexual
Type of data	Routine data	• Routine data • Home visit form	Quantitative questionnaire
Sample size	Estimated minimum of 70	Estimated minimum 88 (44 pre; 44 post)	Minimum 60

Ethical considerations

The protocol was approved by CDC (CGH HSR #2016-204) as "*Research activity involving human subjects but CDC involvement does not constitute engagement in human subject research*".

Ethical approvals were obtained from:

1) Mozambique provincial-level ethics commitee:
    a. Original protocol: CIBS-Z (Ref 03/CIBS-Z/16; June 7 2016);
    b. Amendment (Ref 04/CIBS-Z/17; June 16 2017)
2) VUMC IRB:
    a. Original protocol (#160885; August 4, 2016);
    b. Amendment (July 10, 2017)

Deviations from protocol

During evaluation data collection, four protocol deviations were reported to the ethics committee (though was not required to report to VUMC IRB):

- November 23th, 2016 (reception confirmation by CIBS-Z December 27th, 2016)
- August 18th, 2017
- October 24th, 2018 (reception confirmation by CIBS-Z November 6th, 2018)
- July 2019 (reception confirmation by CIBS-Z July 30th, 2019)

CDC notifications:

- November 26th, 2016
- August 15th, 2017
- December 6th, 2018

Quality assurance

Preparation and training of evaluation team

Before data collection, trainings were provided to the teams involved in evaluation activities from all the participating health facilities, and refreshment trainings were provided at two times during the evaluation implementation period.

Table 2. Summary of trainings

Data	Duration	Participants
December 2016	3 days	5 GBV focal points 5 GBV deputy focal points 19 Counselors
January 2017	4 days	5 GBV focal points 5 GBV deputy focal points 20 Counselors
March 2017	1 days (refresher)	4 GBV focal points 16 Counselors
January 2018	4 days	8 GBV focal points 7 GBV deputy focal points 27 Counselors 10 Psychossocial support officers
March 2018	1 days (refresher)	5 GBV focal points 5 GBV deputy focal points 17 Counselors

Monitoring and data safety

Continuous monitoring and mentoring was done by the GBV focal point of FGH, and the evaluation officer of FGH, in coordination with the DPS GBV focal point. Weekly contact was made with the health facilities' focal points to ensure the quality of the evaluation.

All data were de-identified and placed in a separate electronic database created for the purposes of this evaluation. The files will be kept for five years (per IRB/ethics committee guidelines) in an encrypted, restricted folder on a server at the FGH Quelimane office which designed to protect M&E data, only accessible to key project personnel.

Analysis plan

Descriptive statistics were used for demographics, presented as the median with the inter-quartile range for continuous variables and frequency breakdown (percentages) for categorical variables.

Summary statistics for Objective 1 include the frequency, proportion, median, and IQR of the numbers of patients seeking care, numbers eligible for services, and numbers initiating services will be provided for all sites.

To test for evidence of unadjusted covariate-outcome relationships (i.e., pre- and post-intervention periods), used univariate statistics using the Pearson Chi-square to test differences in proportion for categorical variables, and the nonparametric Wilcoxon rank-sum test to compare the rank distribution for continuous variables. A multivariable analysis of the outcomes of PEP uptake and adherence as negative binomial regressions or proportional odds models was used to estimate the effect of intervention while adjusting for potential confounding and group differences due to lack of randomization.

Descriptive analysis was done for the description of the subpopulation of sexual assault survivors who participated in the questionnaire.

Limitations of design

Using MoH-approved GBV documentation forms as our primary data source also presented some limitations:

- If these forms were not completed properly by responsible health care professionals and patient did not return (with no option for home visit), we lacked any way to verify or resolve missing data issues;
- The GBV program data is not backed up with the use of electronic medical records (and only select indicators are routinely collected by FGH staff and stored in an unlinked database);
- At the moment there is no coordinated system in place to track referrals of GBV patients across health care facilities or to other integrated GBV service providers in the community.

Findings and conclusions

Key findings

The evaluation covered a period of 27 months (July 2016 to April 2019), where data collection occurred between January 2017 and April 2019.

Table 3. Intervention periods

Health Facility	Pre-intervention period	Post-intervention period
Alto Molócuè, Gilé, Ile, Inhassunge, Maganja da Costa, Namacurra, Pebane	July 2016 – January 2017	February 2017 – April 2019
Chinde, Mopeia, Morrumbala	July 2016 – January 2017	February 2017 – October 2017
17 de Setembro, 24 de Julho, Chabeco, Coalane, Hospital Provincial de Quelimane	July 2017 – January 2018	February 2018 – April 2019

A total of 1,806 participants were included in the evaluation (464 pre, 1,342 post). Of those, 353 cases of sexual violence were reported (118 pre, 235 post).

1. Characteristics of the population

	Pre	Post	Total
	n=464	n=1342	n=1806
Sex (n, %)			
Male	48 (10%)	146 (11%)	194 (11%)
Female	416 (90%)	1196 (89%)	1612 (89%)
Type of GBV (n, %) *(1 without information)*			
Sexual	118 (25%)	235 (78%)	353 (19%)
Physical	323 (70%)	1048 (4%)	1371 (76%)
Psychological	21 (5%)	55 (17%)	76 (4%)
Other	2 (0%)	3 (0%)	5 (0%)

Sex, per type of GBV (n female, % female)			
Sexual	118 (100%)	228 (98%)	346 (99%)
Physical	276 (85%)	915 (87%)	1191 (87%)
Psychological	20 (95%)	49 (89%)	69 (91%)
Age (years) (median, IQR), per type of GBV			
Sexual (n=351)	10 (4-14)	12 (6-15)	11 (5-15)
Physical (n=1369)	26 (21-32)	25 (20-32)	25 (20-32)
Psychological (n=76)	23 (19-25)	18 (16-22)	19 (17-24)

2. Access to services – all GBV types

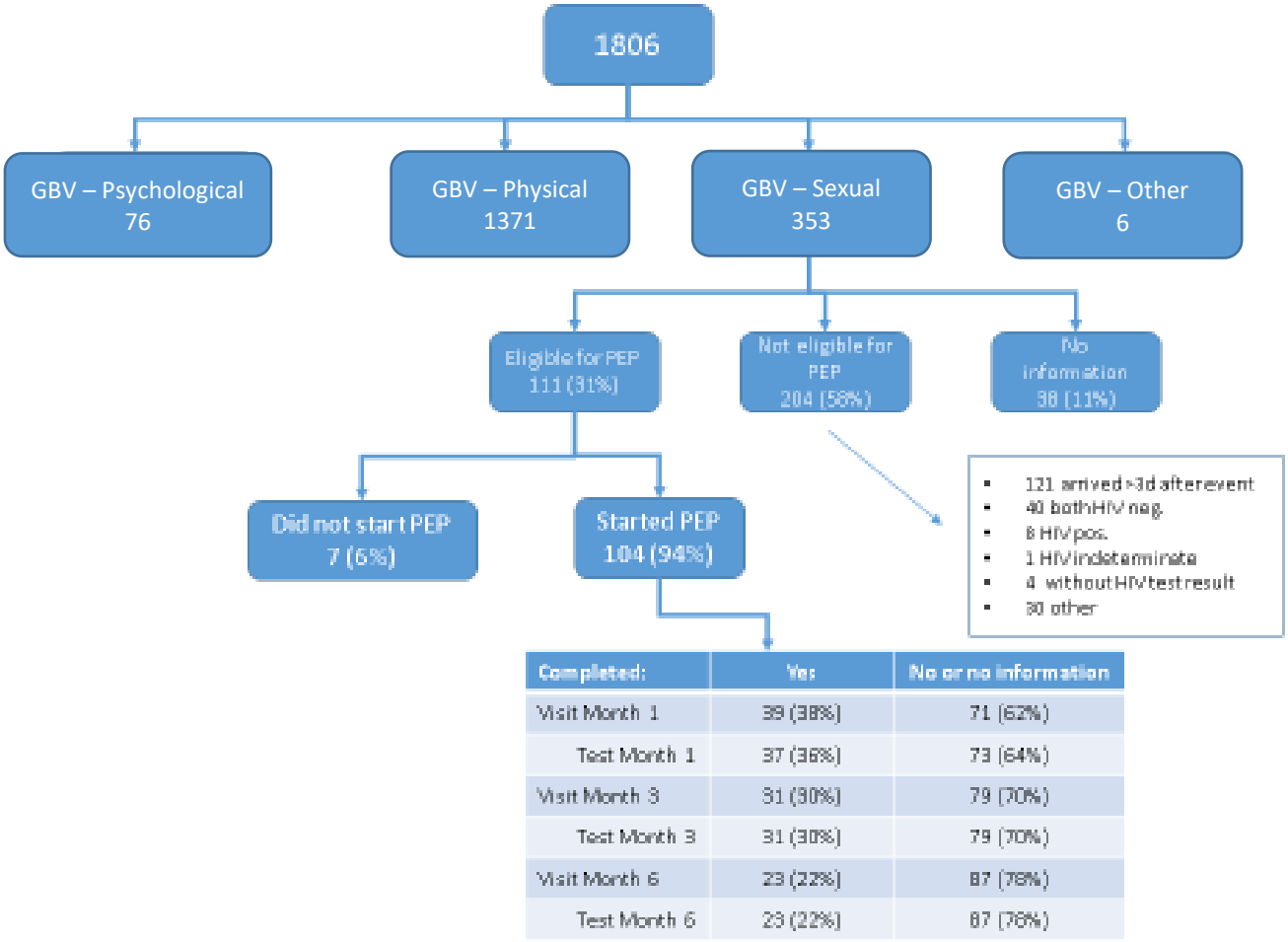
Change in number of GBV registered cases (pre- to post-intervention) (all cases)

	Number of visits		Visits per day			
	Pre	Post	Pre	Post	*Rate ratio (95% CI)*	p
Total	465	1342	0.14	0.19	1.31 (1.18-1.46)	<0.001
Rural	266	1074	0.12	0.22	1.74 (1.52-2.00)	<0.001
Urban	198	268	0.18	0.13	0.69 (0.57-0.83)	<0.001

After adjusting for time of the week and district location, overall, we found a significant increase in the rate of care-seeking visits to health facilities (RR: 1.35) in the post-intervention period when compared to the pre-intervention period ($p<0.001$). This overall rate, however, masks a substantial difference between care-seeking visit rates seen at urban and rural facilities. In urban facilities the rate of visits actually decreased during the post-intervention period.

3. Access to services - Sexual violence

A total of 353 cases of sexual violence were registered, with 111 (31%) eligible for post-exposure prophylaxis (PEP). Of the eligible persons, 104 (94%) started prophylaxis, and 22% of those completed the 6-month follow-up period.



Completed:	Yes	No or no information
Visit Month 1	39 (38%)	71 (62%)
Test Month 1	37 (36%)	73 (64%)
Visit Month 3	31 (30%)	79 (70%)
Test Month 3	31 (30%)	79 (70%)
Visit Month 6	23 (22%)	87 (78%)
Test Month 6	23 (22%)	87 (78%)

Figure 1. Flowchart of access to (post-sexual assault) GBV-I services

Change in number of registered cases of sexual GBV

	Number of visits		Visits per day			
	Pre	Post	Pre	Post	*Rate ratio (95% CI)*	p
Total	118	235	0.04	0.03	0.91 (0.72-1.14)	0.377
Rural	49	164	0.02	0.03	1.45 (1.18-1.82)	**0.02**
Urban	69	71	0.06	0.03	0.52 (0.37-0.74)	**<0.001**

After adjusting for day of the week & district location (i.e. holding variables constant), the post-intervention period shows no improvement in the rate of sexual assault patients seeking care (RR: 0.94 p=0.662). However, as with the overall rate of care seeking, rural sites showed a significant increase (RR: 1.45 [1.18-1.82], p=0.02) while urban sites showed a significant decrease (RR: 0.52 [0.37-0.74], p=<0.001) in post-intervention period.

When looking at the timely (within 72 hours) registry of cases of sexual assault, we saw that there is no improvement after the intervention started (p=0.214).

	Pre	Post	Total
Total	58 (62%)	108 (54%)	166 (56%)
Urban	33 (59%)	31 (59%)	64 (58%)
Rural	25 (66%)	77 (52%)	102 (55%)

Follow-up of persons registered and who initiated PEP

In rural districts, 40% of the persons who started PEP returned for their HIV test at 6 months in the post-period (versus 12% in the pre-period). In urban Quelimane district, the increase was from 0% to 6%, respectively.

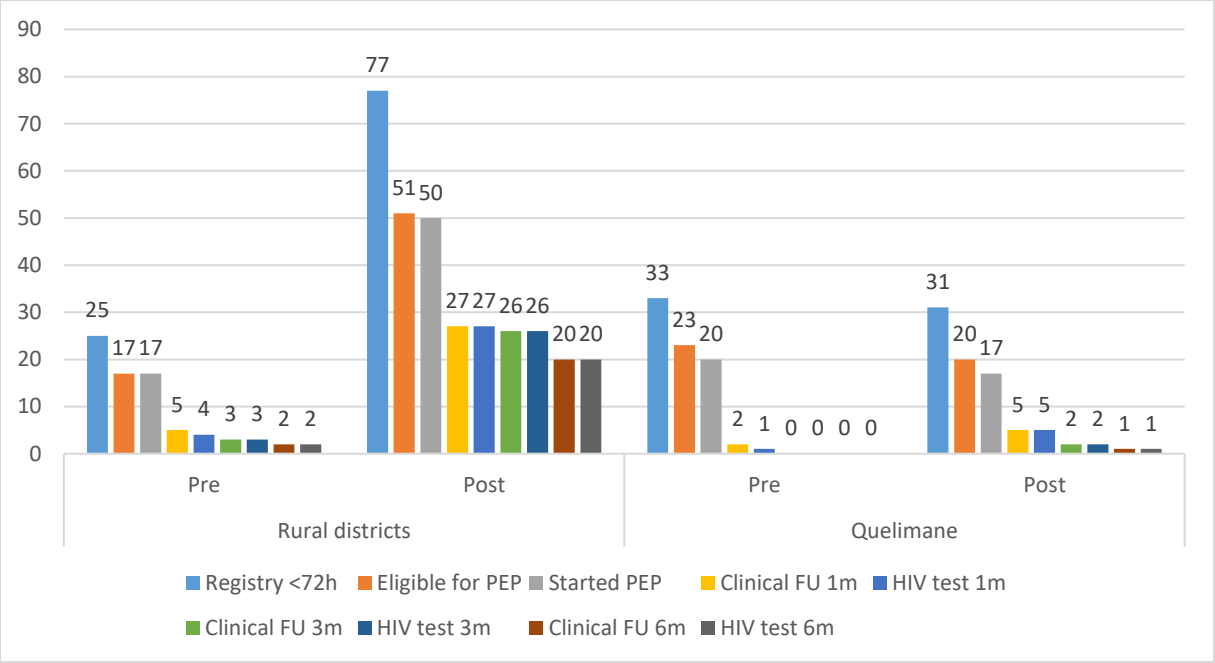


Figure 2. Cascade of retention in post-GBV and PEP services in rural versus urban districts (pre/post)

Visits performed, by consenting for home visits

Of the sexual assault (SA) survivors who initiated PEP (n=67), we asked for consent to compete a home visit if they missed their 1-, 3- or 6-month follow-up appointments for counseling and HIV re-testing. Not surprisingly, there was a difference in return rate

among those who consented versus those who did not, for each of the follow-up visit periods.

	Consent for Home Visit (n=49)	No Consent for Home visit (n=16)	Total (n=65)	p*
SA survivors eligible for PEP who completed 1-month Follow Up visit	28 (57%)	4 (25%)	32 (49%)	0.03
SA survivors eligible for PEP who completed 3-month Follow Up visit	27 (55%)	1 (6%)	28 (43%)	0.002
SA survivors eligible for PEP who completed 3-month Follow Up visit	20 (41%)	1 (6%)	21 (32%)	0.04

*Kruskall Wallis

SA survivors or their caregivers who consented for a home visit, largely returned to the health facility for their follow up visit, thus not requiring home-based services.

	HF visit	*Home visit*	*No information on type of visit*	*Total*
SA survivors eligible for PEP who completed 1-month Follow Up visit	*27 (96%)*	*1 (4%)*	*0*	*28*
SA survivors eligible for PEP who completed 3-month Follow Up visit	*23 (85%)*	*3 (15%)*	*1*	*27*
SA survivors eligible for PEP who completed 3-month Follow Up visit	*18 (90%)*	*2 (10%)*	*0*	*20*

3. Perceptions on GBV services as reported by the interviewed SA survivors

Only eight people were interviewed with the Objective 3 questionnaire. The main reason for a low number of completed interviews was non-eligibility of the survivors who sought care at the health facilities in this period, who were mainly under 15 years of age and thus ineligible to participate in the interview (only 18+ year old patients were included).

From the eight people interviewed, the median age was 25 years (19-35), and half lived in urban districts. Only one person had an educational level higher than primary level. Half were married.

While the sample was quite small, it is notable that the majority indicated they perceived they would have support, would themselves be willing to take PEP, and believed it would help prevent infection with HIV.

Do you think the violence was your fault?	
Yes	0 (0.0%)
No	8 (100.0%)
Not sure	0 (0.0%)
Do you think you will get family support to take PEP?	
Yes	5 (62.5%)
No	1 (12.5%)
Not sure	1 (12.5%)
No response	1 (12.5%)
Are you scared others will see the medications PEP?	
Yes	2 (25%)
No	5 (62.5%)
Not sure	1 (12.5%)
Do you think you can get HIV through sexual violence	
Yes	6 (75.5%)
No	0 (0.0%)
Not sure	1 (12.5%)
No response	1 (12.5%)
Do you think that the medication will prevent you to get HIV?	
Yes	6 (75%)
No	0 (0.0%)
Not sure	1 (12.5%)
No response	1 (12.5%)

Unexpected findings

We found that the enhancement activities did not have the intended positive effect on GBV reporting/ care-seeking in the urban areas of Quelimane district. Reasons to understand why a decrease in service uptake was seen following enhancements to service delivery and increased community sensitization activities should be explored further.

Conclusions/ recommendations

While we found an overall increase in the rate of registry of any GBV event during the post-enhancement period, this improvement was driven entirely by changes seen at the rural sites. Our strategy may have backfired in urban areas, as these facilities show a decrease in the rate and overall number of people seeking care (any type of GBV).

Among survivors of sexual violence, we did not see any change in number of survivors with timely access to services after enhancement activities. However, of those who initiated prophylaxis (PEP), there was a significant increase in follow-up visits and retesting for HIV at 1-, 3- and 6-months post-incident during the intervention period.

There was a difference in results between Quelimane and rural districts in accessing/ use of GBV services in general and PEP for sexual GBV survivors, with a higher increase in the rural areas in the post-intervention period.

The package of enhancement activities at community and health facility levels did improve utilization of GBV services (all types) and adherence to the package of services for SA events. Home visits even when consented were not always needed, suggesting that providing survivors/caregivers with the information (and repeated through the consenting procedure) might increase their awareness and/or commitment for the importance of follow-up visits in these cases.

Over the whole period, there were no incident cases of HIV (i.e., acquired through a reported SA incident) reported among those tested.

Dissemination plan

Preliminary and final results have been discussed within a priority stakeholders' group of investigators and collaborators.

Preliminary results were also presented as a poster exhibit at the AIDS 2018 conference (abstract #TUPEE648) and at the Jornadas Nacionais de Saúde (September 2018, Maputo) as an oral presentation.

Plans are currently underway for dissemination of final results at the provincial level and possibly national level. Additionally, a manuscript is currently being developed to submit to a peer-reviewed journal for international dissemination.

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Appendices

a. Protocol
b. Data collection instruments/tools
c. Informed consent
d. Biosketches
e. Conflict of interest
f. Framework

The evaluation protocol (version 7.0) is submitted along with this report, and contains all instruments, consent forms, biosketches, conflict of interest statements, and framework.