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A SURVEY FOR THE

Komuniti Lukautim Ol Meri (KLOM), Communities Caring for Women and Girls Project

Survey on Family Wellbeing in Western Highlands and West Sepik Provinces

PNGAus Partnership

PACIFIC WOMEN
SHAPING PACIFIC DEVELOPMENT

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THE SCIENCE OF IMPROVING LIVES

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Acronyms and Abbreviations

AusAID	Australian agency for international development
FSC	Family support center
FSVAC	Family sexual violence action committee
GBV	Gender-based violence
IPV	Intimate partner violence
KLOM	Komuniti Lukautim Ol Meri *"Communities taking care of women and girls" in Pidgin*
PHSC	Protection of human subjects committee
PI	Principal investigator
PNG	Papua New Guinea
NGO	Non-governmental organization
SDG	Sustainable development goal
SPSN	Strongim Pipol Strongim Nesen or *"Empower People, Strengthen the Nation" in Pidgin*
WHO	World health organization
WHP	Western Highlands province
WSP	West Sepik province

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Executive Summary

Background

Violence against women in Papua New Guinea (PNG) is rooted in social, political, cultural and traditional beliefs stemming from unequal gender power structures. According to a variety of studies, gender-based violence (GBV) is an epidemic in PNG and has remained so for over a decade. The country's Government recognizes the importance of addressing this issue and set targets in the PNG Vision 2050, the PNG Development Strategic Plan (2010-2030) and the Medium-Term Development Plan (2018-2030) to reduce violence against women and girls. It has also developed a National Strategy to Prevent and Respond to Gender Based Violence 2016-2025.

In the Pacific Women Shaping Pacific Development partnership program between the Government of Australia and 14 Pacific Island countries, including PNG, one core component focuses on ending violence against women and girls. **"Kommuniti Lukautim Ol Meri"** (KLOM) means "communities caring for women and girls". KLOM is a multi-year, multi-phased project designed by FHI 360 in partnership with the Australian Government to address violence against women and girls in PNG. The first three years (2012 – 2015) of the project were funded under the *Strongim Pipol Strongim Nesen* (SPSN). The second three years of the project (2015 -2018) were funded under the Australian Government. An additional third phase (2018-2021) has been funded under the Pacific Women Shaping Pacific Development program of the Australian Government. KLOM project aims to strengthen community systems to address violence against women and girls in three districts of Western Highlands province (WHP) and two districts of West Sepik province (WSP).

Study Overview

In 2014, FHI 360 conducted a household survey among men and women living in the KLOM intervention communities to inform the KLOM phase II (2015-18) intervention design and to document the extent of violence against women and girls in the intervention area. The survey serves as the baseline to assess KLOM project impact at the end of the phase II intervention. Using the same methodology, FHI 360 conducted another survey in 2018 *to measure the same key indicators as those collected at baseline which aimed to assess the effectiveness of the KLOM project Phase II in reducing the incidence of psychological, sexual and physical violence from men to women in the last year. It also measures prevalence of GBV as* ***ever*** *experienced.*

The study population comprised men and women 18-45 years who had lived in the project intervention area for more than one year. Participants were also men and women who were not under the influence of alcohol at the time of interview. The 2018 survey differed slightly

from the 2014 study as it included men and women aged 15-39 years who lived in the intervention area for more than one year. For comparison, the analysis presented in this report is limited to those aged 18-39 years.

Descriptive analysis was done on select variables as simple frequencies; proportions were calculated for categorical demographic and self-reported behavioural variables by province and by survey round. See Figure 1 for a summary of the survey outcome measures.

Results

Demographic variables: A total of 329 individuals (198 women and 131 men) and 329 individuals (179 women and 118 men) were interviewed in WHP and WSP respectively. The majority of the men and women in both locations were 18 to 29 years old. Close to a third of the men and women in WHP and a quarter of women in WSP had a disability (e.g., difficulty seeing, hearing, walking, remembering or concentrating on things, self-care such as hygiene, dressing and communication). Most of the women and about half of the men were currently married and living with their spouse.

Figure 1. Study Outcomes

Primary study outcome: Incidence of physical assault, forced sex, psychological or emotional violence was estimated by calculating the proportion of women who *in the past year* experienced either forced sex or physical assault from an intimate partner (including husband or partner).

Secondary outcomes:

- Prevalence of rape or sexual violence to women was estimated by the proportion of women who have *ever* experienced forced sex in their lives regardless of their relationship with the perpetrator.
- Prevalence of physical violence was estimated by the proportion of women who ever experienced at least one episode of beating by their husbands or partners in their lives.
- Proportion of men and women who knew where services for certain types of GBV could be accessed and proportion of survivors who sought assistance from police or medical services for sexual or physical violence ever in their lives as well as in the past year.

A small but significant proportion of married men and women in both WHP and WSP reported that they married before the age of 18, the legal age of marriage in PNG. In WSP, monogamy (as opposed to polygamy) is more common than in WHP. In WSP three quarters of married women were the only wife of the husband, while in WHP, about half of married women were the only wife.

Gender norms: Using a variety of statements, the survey assessed changes in gender norms from baseline to endline. Agreement with harmful gender norms primarily dropped, but agreement with five justifications for wife beating remained high, especially among women. Bride price remained a barrier to women's empowerment and constituted an important justification for IPV.

Prevalence and incident of IPV: While some variation by location and time was observed, all forms of incident and prevalent IPV remain persistently high in the KLOM program areas with psychological violence being the most common. Large percentages of women reported being forced to have sex within marriage and a small but important percent of women reported being physically assaulted during pregnancy.

Risk and Protective factors: Women's higher education and economic empowerment factors were protective for women against IPV, while polygamy, bride price, lower education, younger age, disability and agreement with justification for wife beating were risk factors for IPV. Women's economic activities such as controlling a joint or sole bank account and having her own money were important contributors to women's empowerment.

Sources of care: The majority of men and women knew where to seek help and comparatively large percentages of female physical violence survivors reported having sought help, though the first point of contact was primarily identified as the police. The overwhelming majority of men reported having helped women and child violence survivors in the past and were willing to do so in the future.

Recommendations

- Increase women's access to economic empowerment small group activities and opportunities for family based financial literacy and business.
- Create a project strategy for engaging disabled women in program activities and to assist them in accessing services.
- Create a focus on forced sex within marriage including SBCC for reaching women and men on prevention of forced sex in marriage as well as the benefits of seeking services in the aftermath, including access to contraception.
- Given the protective nature of girls' education, work on improved access to secondary education for girls and boys while scaling up the Safe Schools initiative to transform gender norms and attitudes by addressing issues of relationships, gender roles, power and coercion.
- Reassess program interventions in WSP versus WHP given cultural differences, including risk factors of polygamy and more entrenched norms supporting IPV.
- Continue to conduct outreach interventions to educate community members on the rights of women and girls in decision making about issues affecting themselves and their family members.
- Work with service providers to strengthen linkage and referral systems for survivors.
- Continue to promote awareness of the availability of services and where the survivors should go first to access services, emphasizing the importance and benefits of seeking medical care within 72 hours of rape.
- Given the prevalence of emotional violence, reassess program materials and training programs to better integrate addressing this type of IPV.

1. INTRODUCTION

1.1| Definition of the problem

Gender-based violence (GBV) is an evolving term that increasingly refers to "violence that targets individuals or groups on the basis of their gender. It is an umbrella term for any harmful act perpetrated against a person's will that is based on socially ascribed differences between males and females" (IASC, 2015). Violence against women is the most prevalent form of GBV and is defined as "…any act of GBV that results in or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or private life" (UN, 1993).

1.2 | Problem Statement for Papua New Guinea

The available data on violence against women in Papua New Guinea (PNG) indicates it's an epidemic. A recent study reported that 68% of PNG women were estimated to have suffered some form of physical or sexual violence in their lifetime and 41% of men admitted to having raped someone (Darko E, et. al., 2015). A similar study conducted in the 1990s found that 55% of women reported having ever been forced into sex, usually by men known to them (Lewis I, et al (2008). Over a decade later, the prevalence of rape has not diminished. In 2014, FHI 360 conducted a survey to measure the prevalence of sexual and physical violence against women and the uptake of medical and legal services among survivors in Western Highlands Province (WHP) and West Sepik Province (WSP). This survey showed that over half of women (56.3% and 52.3% from WHP and WSP, respectively) were raped by a man during their lifetime, with similar proportions reporting that they had experienced physical violence or rape by a man within the past year (FHI 360, 2014).

In PNG, violence against women is rooted in social, political, cultural and traditional beliefs stemming from unequal gender power structures. Violence against women and girls contributes to and is exacerbated by women's economic vulnerability. Compounding this situation are a high unemployment rate, social instability, urban migration, polygamy and the disintegration of clan protection. Further, stemming in part from the custom of bride price, women are viewed as commodities. For husbands, this can be used to justify abuse of wives they "purchased," while young men in the community who can't afford to pay a bride price, justify rape as the only option for having sex (Ganster-Breidler, M, 2010).

1.3 | Efforts to curb violence against women and girls in Papua New Guinea

The country's Government recognizes that violence against women and girls is impeding country development and has set targets in the PNG Vision 2050, the PNG Development Strategic Plan (2010-2030) and the Medium-Term Development Plan (2018-2030) to reduce violence against women and girls. In addition, it has developed a National Strategy to Prevent

and Respond to Gender Based Violence 2016-2025. In the Pacific Women Shaping Pacific Development partnership program between the Government of Australia and 14 Pacific Island countries, including Papua New Guinea, one core component focuses on ending violence against women and girls.

1.4 | Kommuniti Lukautim Ol Meri Project (KLOM)

"Kommuniti Lukautim Ol Meri" means "communities caring for women and girls". KLOM is a multi-year, multi-phased project designed by FHI 360 in partnership with the Australian Government to address violence against women and girls in PNG. The first three years (2012 – 2015) of the project were funded under the *Strongim Pipol Strongim Nesen* (SPSN). The second three years of the project (2015 -2018) were funded under the Australian Government. An additional third phase (2018-2021) has been funded under the Pacific Women Shaping Pacific Development program of the Australian Government.

KLOM project aims to strengthen community systems to address violence against women and girls in three districts of Western Highlands province (WHP) and two districts of West Sepik province (WSP). The KLOM project is grounded in the socio-ecological model – an international best practice model that works to facilitate decisive action at the individual, relationship, community, institutional and societal levels to influence positive changes in behaviours and practices to end violence against women and girls. The project provides technical assistance to family support centres in WHP and WSP to provide post-GBV services for survivors of violence, including psychosocial support, emergency contraception, HIV/STI post exposure prophylaxis, Hepatitis and tetanus vaccination and case management. In addition, the project implements community-based GBV prevention activities at household and community levels, conducts livelihood activities for men and women's groups and provides psychosocial support. At the village level, groups of men and women from the community known as community mobilizers work with village leaders to change behaviour at the community level to curb violence against women and girls and strengthen referral of survivors including organizing transport to the hospital.

In 2014, FHI 360 conducted a household survey among men and women living in the KLOM intervention communities to inform the KLOM phase II (2015-18) intervention design and to document the extent of violence against women and girls in the intervention area. The survey serves as the baseline to assess the KLOM program impact at the end of the phase II intervention. The study estimated the magnitude of violence against women and girls, assessed the population's attitude towards violence against women and girls as well as violence against children, identified the factors of vulnerability among women and girls and estimated the uptake of services by survivors.

Using the same methodology, another survey was conducted in 2018 to measure the same key indicators as those collected at baseline. FHI 360 then planned to compare these results to the baseline values in the KLOM intervention communities to describe project outcomes and

impact[1]. The findings from this research can be used by government agencies, civil society organizations and bilateral agencies for planning of interventions and advocacy and by FHI 360 to make any necessary adjustments to Phase III of KLOM.

The researchers chose to give a neutral and positive title to this study in order to minimize potential negative reactions from surveyed communities.

1.5 | Study Goals and Objectives

This study aims to assess the effectiveness of the KLOM project Phase II in reducing the incidence of psychological, sexual and physical violence from men to women in the last year. It also measures prevalence of GBV as *ever* experienced.

The Secondary Objectives of the study are to:

- Measure the uptake of medical and legal services among survivors of sexual and physical violence in KLOM intervention areas
- Identify demographic and economic factors in women's lives associated with ever experiencing violence
- Identify the community support and services to women survivors of violence
- Assess the community response to violence against women and girls
- Assess both men's and women's attitude towards violence against women and girls

[1] Note: Not all baseline key indicators were measured again at endline. See the limitations section for details.

2. METHODOLOGY

2.1 | Study Design

This household-based cross-sectional quantitative study gathered data from women and men in the KLOM project intervention sites in the Western Highlands and West Sepik provinces. In the Western Highlands a total of 8 census units in two districts: Dei and Mt Hagen Central were selected from a total of 17 census units using probability proportional to size. Each of the census units formed a cluster, however, because one census unit—namely Min-Mugli was small in terms of number of households—the site was merged with the neighbouring Rouant census division. In West Sepik, there were a total of 10 census units, however 2 census units were dropped because they were no longer involved in the intervention. All remaining 8 census units were included as clusters. Table 1 provides list of census units that were grouped from each district and province. Selected participants were contacted at their home and invited to a safe location where they were interviewed face-to-face by trained same-sex interviewers using paper-based structured questionnaires. The survey was descriptive in nature.

Table 1. List of Census Units for WHP and WSP Clusters

Province	District	LLG	Ward	Census unit	Cluster No	Sample Male	Sample Female
WHP	Dei	Kotna rural	Kinjibi	Kinjibi-1	1	11	20
				Kaupena	2	18	19
				Rumnum	3	11	14
				Guinmuli	4	10	15
				Rouant	5	10	15
				Bin - Mugli	5		
	Mt Hagen	Mt Hagen town	Warakum	Warakum - Resident	6	25	61
			Holy Trinity	Holy Trinity T.C.	7	19	22
			Pultimp	Pultimp	8	25	38
Total						**133**	**212**
WSP	Vanimo Green River	Vanimo urban	Vanimo Town	Warastone	1	61	105
				Krisa Settlement	2	11	21
		Bewani / Wutung Onei Rural	Krisa	Aule	3	19	27
				Krisa	4	12	12
			Laitre	Isi	5	12	18
				Pino	6	11	18
				Onip	7	5	10
				Laitre C/M	8	2	1
Total						**133**	**212**

2.1 | Study Population

The study population comprised men and women 18-45 years who had lived in the project intervention area for more than one year. Participants were also men and women who were not under the influence of alcohol at the time of interview. The 2018 survey differed slightly from the 2014 study as it included men and women aged 15-39 years who lived in the intervention area for more than one year.

For comparison, the analysis presented in this report is limited to those aged 18-39 years.

2.2 | Enumeration and Sampling

The survey used a two-stage cluster sampling methodology to obtain representative samples of men and women in the respective intervention areas. Samples for each of the two provinces were drawn independently. The sampling design was self-weighted: the first stage clusters (i.e. census units) were selected using probability proportional to size using the 2011 National Population Census data. In the second stage, a fixed number of participants were selected from each cluster using systematic random sampling. Census units with less than 25 households were merged with other census units located in the same ward to make a single cluster.

Two teams of community mobilizers and action group members each from the two respective provinces conducted enumeration of the selected census units and produced an updated list of all the men and women aged 18-45 who had lived in the area for more than a year. Participants were selected using systematic sampling from a random start point on the list. In each cluster 15 men and 25 women were selected, with men and women selected independently. A total of 640 individuals, 200 women and 120 men each from WHP and WSP were selected to participate in the survey. The listing was destroyed once sampling was completed and the list of selected participants was destroyed once data collection was completed in each cluster.

Village leaders were informed about the survey a week prior to data collection and were requested to inform the population. Selected participants were notified that they were selected randomly and asked to turn up at a designated safe location for an interview. Survey team members were composed mainly of the action group members and community mobilizers who conducted the enumeration. To maintain confidentiality, interview teams were from a different census unit than the one in which they conducted the interviews.

2.3 | Survey instruments

Two separate survey instruments, one for women and the other for men, were used to collect data. The 2018 survey was called an “endline survey” and was intended to compare findings with the 2014 baseline survey results; however, some questions asked in the baseline survey were not repeated. For the 2018 survey, the team elected to use standardized and validated questions on women’s empowerment and intimate partner violence (IPV) from the Demographic and Health Surveys women’s empowerment and domestic violence modules and to exclude participants under the age of 18 (ICF). The areas of similarity and difference across the two surveys are as follows:

a) Data from this survey that was similar to the baseline survey
   - Socio-demographics characteristics: (age, age when first married, marital status, polygamy status, education)
   - Social norms (freedom to seek health care, acceptability of being raped or beaten by intimate partner, forced marriage and bride price)
   - Personal Experiences (physical assault and forced sex by partner, uptake of GBV services, men's experience as perpetrators; men's experience in abating violence)
   - Knowledge and uptake of services and assistance to survivors of violence (services for physical violence, services for sexual violence, uptake of services, men's knowledge of services for violence)

b) Data from this survey that were new or different from the baseline survey
   - Socio-demographics characteristics: (disability, selection of husband/wife, forced marriage)
   - Gender Roles (women's participation in decision making regarding use of contraception, schooling and discipline for children, seeking health care, seeking employment and participation in business and finance)
   - Social norms (preference of son over daughter in education, women right to express her opinion and justifications for wife beating)
   - Personal Experiences (violence on men by women, forced sex on women while pregnant rape experienced by women and sex of perpetrators)

2.4 | Data collection

The team members visited the designated safe location and screened selected participants to see if they were the right participants before proceeding with the interviews. The interviewers visited households to request an interview only after the selected participant did not turn up at a community-provided safe location for an interview. In case of the participant's absence, surveyors informed other family members and set an appointment for the next day with the selected participant. If nobody was found at the participant house, the house was visited on two other occasions (total 3 visits), after which the participant was declared "not found". Selected participants who were not found at home after 3 visits and those who refused to participate prior to, or during informed consent were not replaced.

Each survey team comprised of two men and three women. All team members attended a one-week training on the survey protocol, its purpose, methodology, sampling approach and ethics and on the survey instrument. The training also entailed interviewing techniques and interview practise sessions. Field supervisors were responsible for ensuring protocol adherence during fieldwork. Supervisors ensured that informed consent was adequately administered and documented, that forms were completed and that all data were safely stored and transported.

FHI 360 Principal Investigators and co-investigators provided overall field supervision to ensure data were collected according to the protocol, data recording was complete and that informed

consent procedures were administered and appropriately documented. In addition, field supervisors ensured that data collection was conducted in a manner that respected participants' rights and wellbeing. Paper based structured questionnaire for men and women were used to record all the pre-coded answers beside each question.

2.5 | Data Management and analysis

Immediately following interviews, the interviewers brought completed questionnaires to field supervisors for review. The supervisors checked if interviewers had followed the skip instructions and ensured completeness. Once ensuring no errors, the supervisors signed the questionnaire. The questionnaires were stored safely in a locked cabinet at the FHI 360 branch offices in Mt Hagen and Vanimo and subsequently shipped to Port Moresby where data was entered into an electronic data file.

Data was double entered using Epi-Info 7.2.2.6 software (Centres for Disease Control and Prevention) by two part-time data entry clerks. The two data files were exported to Stata 11 (Stata Corporation) which were then matched and discrepancies corrected. Stata 11 was also used for data processing and analysis. Inconsistencies were resolved and data appropriately recoded in a written "do-file". Descriptive analysis was done on select variables as simple frequencies; proportions were calculated for categorical demographic and self-reported behavioural variables by province. Point estimates were calculated with 95% confidence intervals. Comparison of categorical data by provinces was done using the chi-square test or Fisher's exact test (if expected frequencies were less than 5). Statistical significance was defined at a p-value of 0.05 or less.

PRIMARY OUTCOME

Incidence of physical assault, forced sex, psychological or emotional violence was estimated by calculating the proportion of women who *in the past year* experienced either forced sex or physical assault from an intimate partner (including husband or partner).

SECONDARY OUTCOMES

- Prevalence of rape or sexual violence to women was estimated by the proportion of women who have *ever* experienced forced sex in their lives regardless of their relationship with the perpetrator.
- Prevalence of physical violence was estimated by the proportion of women who ever experienced at least one episode of beating by their husbands or partners in their lives.
- Proportion of men and women who knew where services for certain types of GBV could be accessed and proportion of survivors who sought assistance from police or medical services for sexual or physical violence ever in their lives as well as in the past year.

Additional outcomes measured include prevalence and incidence of GBV perpetration reported by sampled men and men's participation in abating GBV. Assessment of the level of awareness of the harmful gender norms in the community and identification and uptake of GBV services were also assessed.

The prevalence of GBV was measured by dividing the number of women who have ever experienced specific GBV type by the number of women in the sample for each province multiplied by 100. The total number of women who were currently or previously married or currently in relationship with a man were included as denominators. For univariate and multivariate risk factor analysis, odds ratios (OR) and 95% CI were calculated by logistic regression with 'awareness of harmful gender norms' and 'incidence of IPV' included as separate outcomes. All independent variables indicating an association with these outcomes ($p<=0.20$) in the univariate analysis were entered into a multivariate conditional logistic regression model using backward step-wise selection and the Wald test after estimation to identify the most parsimonious model.

This analysis was done to determine socio-demographic as well as marital and other factors associated with increased awareness of the harmful gender norms and incidence of intimate partner violence.

COMPARISON WITH BASELINE DATA

There were several questions asked in both the baseline and this endline surveys which were identified and analyzed for trends. The incidence and prevalence of physical and sexual violence in the endline survey covers only women who were either currently or previously married or living with partners. All participants, including those who were single and never married, were asked in a separate question if they have ever been forced to have sex in their life time even when they were a child. In the baseline everybody, including the single and never married women, were asked if they have experienced either physical or sexual violence from any man. Contingency table analysis was performed on each of these questions in which the proportions or rates for the baseline was compared with that from the endline survey. Chi-squared test was performed and those with $P<0.05$ were considered as statistically significant difference.

2.6 | Ethical considerations

The study received ethical approval from both the Protection of Human Subjects Committee (PHSC) of FHI 360 as well as the local research ethics board under the "PNG Science and Technology Secretariat". The PIs were trained and certified by FHI 360 in research ethics and in turn provided training to the field research team of interviewers and supervisors. Research ethics training focused on the fundamental principles of ethics in human research, including the process of obtaining informed consent from all participants. Part of the informed consent process was to inform participants of the help available for survivors of violence and to provide referral if they wanted help.

Data collection only proceeded with informed consent of the participants and each participant was given the freedom to refuse or to withdraw from the study at any time. Interviews were conducted in spaces with audio-visual privacy.

The informed consent process involved stating the reasons for the survey, duration of the interview, benefits and risks involved as well as re-assuring the participants that confidentiality

would be maintained. The latter involved ensuring that no personally identifiable information was collected. The research team were required to sign a confidentiality agreement and code of conduct agreeing not to share information with anyone outside of the research team.

3. CHARACTERISTICS OF THE STUDY POPULATION

This section presents the socio-demographic characteristics of the study population. It also presents results related to spouse/partner selection and the nature of the study participants' marriage e.g. arranged, forced, or personal choice. The survey was conducted concurrently in both provinces from the fourth week of July to the second week of August 2018.

3.1 | Socio-demographic characteristics of the study Population

A total of 329 individuals (198 women and 131 men) and 329 individuals (179 women and 118 men) were interviewed in WHP and WSP respectively.

The majority of the men sampled from WHP (66.4%) and WSP (64.4%) were in the 18 to 29 age group (see Table 1.2). Over half the women sampled from both WHP (55.1%) and WSP (55.4%) were in the 18-29 age-group.

Table 2: Demographic characteristics of the study population

Sex	Women		Men	
Province	**WHP**	**WSP**	**WHP**	**WSP**
Number of Participants (#)	198	179	131	118
Age (years) (%)				
18-24	33.4	38.6	47.3	43.2
25-29	21.7	16.8	19.1	21.2
30-34	13.1	23.4	9.9	13.6
35-39	18.2	11.2	9.2	15.3
40-45	12.6	8.9	14.5	6.8
Unknown	1.0	1.1		
Has a disability (%)				
Yes	28.8	25.1	29.8	11.9
No	71.2	74.9	70.2	88.1
Level of Education (%)				
Never attended school	18.2	3.4	8.4	7.6
Completed Elementary	12.1	6.1	6.1	5.9
Completed Primary School	26.8	57.0	27.4	50.0
Completed High School	21.7	27.9	29.8	18.6
Completed Secondary School	14.1	5.0	19.1	14.4
Completed College	7.1	0.6	9.2	3.4
Marital Status (%)				
Currently married living with spouse	65.7	63.1	44.6	50.8
Not married and living with permanent partner	0.0	0.0	1.5	0.0
Separated or divorced (No partner in house)	9.6	7.3	0.0	0.0
Separated or divorced (living with a partner)	2.0	1.7	0.8	1.7
Widow (no partner in house)	1.5	0.6	0.8	0.9
Widow (living with a partner)	0.0	0.0	0.0	0.0
Never married and not living with a partner	21.2	27.3	52.3	46.6

Close to a third of the men (29.8%) and women (28.8%) sampled in WHP had a disability. In WSP, on the other hand, there were more women (25.1%) with a disability among the sampled population than men (11.9%). The interviewers probed for a wide range of disabilities, including difficulty seeing, hearing, walking, remembering or concentrating on things, self-care such as hygiene, dressing and communication (for example understanding or being understood).

Most of the women sampled from both WHP (65.7%) and WSP (63.1%) were currently married and living with their husbands; while 21.2% of women sampled in WHP and 27.3% in WSP had never been married and were not living with a partner. Only a small proportion of the women sampled from both provinces were either divorced/separated or widowed. Those who were divorced/separated or widowed but living with a steady partner were grouped together with married and living with partner for further analysis. Among the men sampled, about half of those in WSP were married and living with a partner (50.8%) while 46.6% had neither been married nor were living with a partner. Among the men sampled in WHP, over half had never been married and were not living with a partner (52.3%) while 44.6% of them were married and living with their spouses.

A larger proportion of women sampled in WHP (57.1%) had completed primary school education or less whereas 58.1% of men had completed a high school education or above. In comparison, two-thirds of women (66.5%) and just under two-thirds (63.5%) of men sampled in WSP had completed primary school education or less (See Table 2).

3.2 | Occurrence of Early Marriage, Polygamy and Forced Marriage

A small but significant proportion of married men and women in both WHP and WSP reported that they married before the age of 18, the legal age of marriage in PNG (See Table 3). A slightly higher proportion of men (17.0%) and women (17.3%) in WHP were married before the age of majority compared to men (12.7%) and women in WSP (14.0%). Almost two-thirds of the married men in both WHP (64.0%) and WSP (65.1%) married for the first time between the ages of 20 to 29, whereas women first married between the ages of 20 and 24. About 72.5% of women in WHP and 63.6% of women in WSP first married between the ages of 18 and 24.

Among the women who were married and living with their husband, 52.6% of women in WHP are the only wife of their husband, while 24.4% and 14.7% were the first and second wives, respectively, in a polygamous marriage. Polygamy was less common in WSP where 76.2% of married women are were the only wife of the husband. Among married men in WHP, 81% reported having only one wife while 100% of married men in WSP reported having only 1 wife.

41.9% of married men in WHP and 41.3% in WSP reported that they made the decision in choosing their current or last wife/partner. In the same vein, half of the women in WHP (50.0%) and less than half the women in WSP (43.8%) reported that they decided in selecting their husband/partner. More married men in WHP (41.9%) reported that they did not have any say in the choice of their wife compared to men in WSP (14.3%). As shown in Table 3, family members chose wives for 35.5% of the married men in WHP. A third of married women in WHP (33.3%)

reported that they did not have a say in choosing their husbands/partners, compared to what was reported by married women in WSP (21.5%).

Table 3: Marital characteristics of married study population

Sex	Women		Men	
Province	**WHP**	**WSP**	**WHP**	**WSP**
Number of Participants (#)	156	130	62	63
Age when first married or live with partner (%)				
Less than 15 years old	2.6	1.6	14.7	6.3
15 to 17 years old	14.7	12.4	3.3	6.4
18 to 19 years old	27.6	24.8	11.5	12.7
20 to 24 years old	44.9	38.8	31.2	38.1
25 to 29 years old	6.4	13.2	32.8	27.0
30 to 39 years old	0.6	1.5	1.6	9.5
Don't know	3.2	7.7	4.9	0.0
Wife's ranking (number of wives of a man) (#)				
Husband has only 1 wife (one)	52.6	76.2	(81.0)	(100.0)
First wife	24.4	10.0		
Second wife (two wives)	14.7	10.0	(6.3)	
Third wife (three wives)	3.8	2.3	(3.2)	
After third in ranking (> 3 wives)	1.9	1.5	(1.6)	
No response	2.6	0.0	(7.9)	
Who chose your current/last wife/husband or partner? (#)				
I myself	50.0	43.8	41.9	41.3
I and husband/wife or partner	7.7	34.6	16.1	39.7
I and someone	9.0	0.0	0.0	4.8
My family	23.7	17.7	35.5	9.5
My wife/husband/partner's family	6.4	1.5	1.6	4.8
Someone else chose	3.2	2.3	4.8	0.0
Was asked for approval when spouse/partner was chosen (%)	n=52	n=28	n=25	n=9
Yes	98.1	71.4	92.0	77.8
No	1.9	28.6	8.0	22.2

Among those men and women who had no say in selecting their spouses or partners, 28.6% of the women in WSP and 22.2% of the males said "no" when asked if they were asked for their approval compared to 1.9% of the women and 8.0% of the men in WHP.

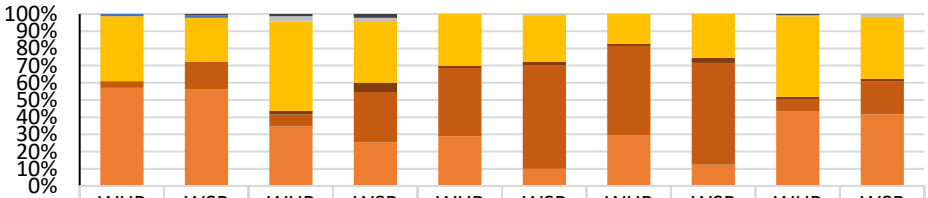
4. GENDER ROLES

There were a series of questions which sought to establish the status of women in the community. These questions entailed involvement of women in decision making on issues such as contraception, employment, health care and children's welfare. Women were asked questions such as: "Who usually makes decisions about your health care?" and "Who in your family usually has the final say on whether or not you use contraception?". The men were also asked related questions: "Who usually makes decisions about your wife's or partner's health care?" or "Who in your family usually has the final say on whether or not your wife uses contraception?".

4.1 | Gender roles as perceived by women

Figure 1 shows the percentage of involvement of women in decision making either on their own or jointly with their husband or partners or with someone else about the issues mentioned above. The results are from women in WHP (n=156) and WSP (n=130) who were currently married or staying with a partner as well as those previously married. In WHP, the involvement of women in in decision making ranged from 43.6% "taking contraception" to 83.7% "children's discipline". There was a similar pattern among women in WSP where involvement ranged from 60.0% "taking contraception" to 74.6% "children's discipline". Though the pattern of decision making in both WHP and WSP were similar, a higher proportion of women in WSP were involved in decision making about whether they should take contraception, whether they should work to earn money and about their health care compared to the women in WHP. Almost the same proportion of women in WHP (69.9%) and WSP (72.3%) were involved in decision making about their children's schooling.

Figure 1. Percentage of women involved in decision making in managing personal and domestic affairs

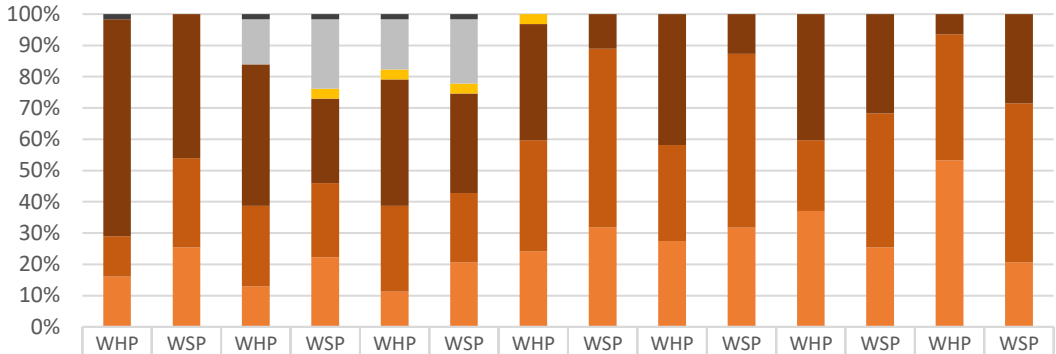


	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP
	health care		use of contraception		childrens schooling		childrens discipline		work to earn money	
no response	0.0	0.8	1.3	2.3	0.0	0.0	0.0	0.0	0.7	0.0
decision not made	0.0	0.0	3.2	2.3	0.0	0.8	0.0	0.0	0.7	1.6
Others decide	1.3	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
her husband/partner decides	37.8	25.4	51.9	35.4	30.1	26.9	17.3	25.4	47.1	36.2
women with someone else	0.0	0.0	1.9	5.4	1.3	2.3	1.3	3.1	1.3	1.5
jointly with her husband/partner	3.9	16.2	7.1	29.2	39.7	60.0	51.8	59.2	7.1	19.2
women on her own	57.0	56.2	34.6	25.4	28.9	10.0	29.5	12.3	43.5	41.5

4.2 | Gender roles as perceived by men

Figure 2 shows the percentage of sampled men who believe women are involved in decision making either on their own or jointly with their husband/partners or with someone else about the same issues. Two additional questions were asked about the participation of women in decision making which include “use of money earned by the men” and “purchase of valuable household items”. Men were not asked about decisions regarding women seeking employment.

Figure 2. Percentage of men involved in decision making in managing personal and domestic affairs



	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP	WHP	WSP
	wifes health care		wifes use of contraception		his use of contraception		childrens schooling		childrens discipline		use of money he earns		major household purchase	
no response	1.6	0.0	1.6	1.6	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
decision not made	0.0	0.0	14.5	22.2	16.1	20.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
others decide	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
men with someone else	0.0	0.0	0.0	3.2	3.2	3.2	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
men decide on his own	69.4	46.0	45.2	27.0	40.3	31.8	37.1	11.1	41.9	12.7	40.3	31.7	6.5	28.6
men with wife/partner	12.9	28.6	25.8	23.8	27.4	22.2	35.5	57.1	30.7	55.6	22.6	42.9	40.3	50.8
wife/partner decides	16.1	25.4	12.9	22.2	11.3	20.6	24.2	31.8	27.4	31.7	37.1	25.4	53.2	20.6

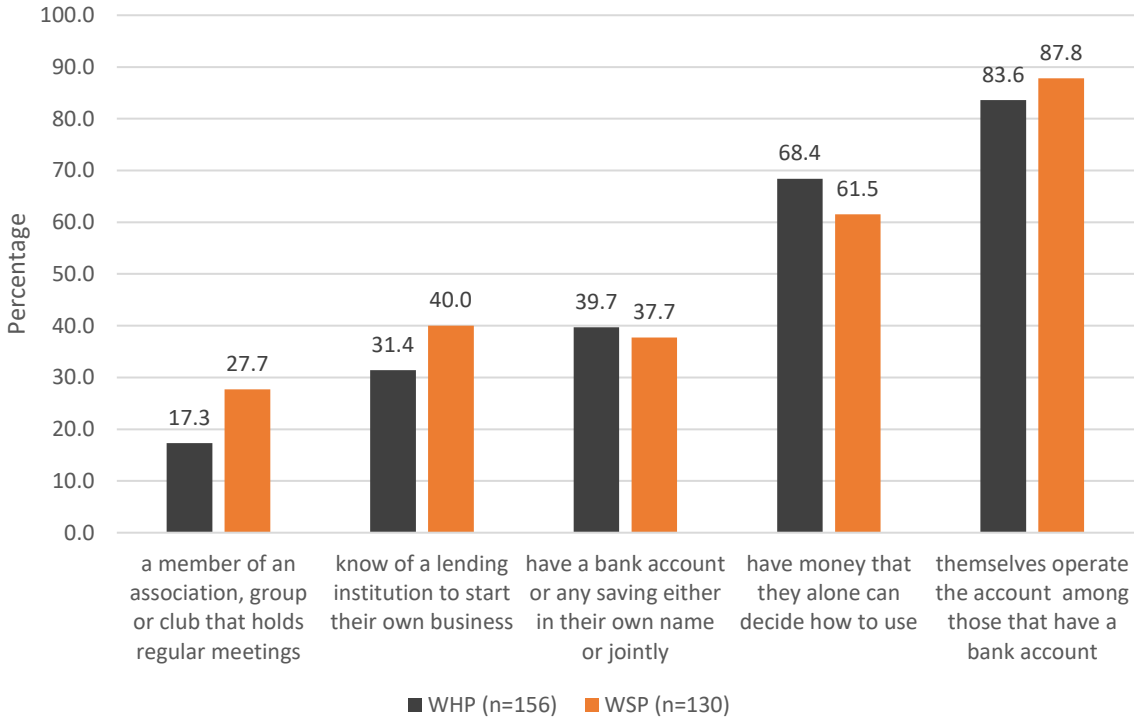
A large difference in opinion among men in WHP and WSP about women’s involvement in decision making; about “taking contraception”, “children’s schooling”, “children’s discipline” and “major household purchase”” were identified. More men in WSP believed that women were involved in decision making about the first three issues compared to men in WHP, whereas more men in WHP believed women were involved in decision making about “major household purchases”.

4.3 | Women’s participation in economic activities

As a measure of women’s status and empowerment, female participants were asked if they were members of any type of association, group or club that holds regular meetings. The findings in Figure 3 show that the level of such participation by women in WHP and WSP follow similar patterns with very little variation between the two provinces. Women (17.3% in WHP and 27.7% in WSP) reported the least participation related to belonging to an association that holds regular meetings. A large proportion of women in WHP (68.4%) and WSP (61.5%)

reported having money that they alone can decide how to use. An overwhelming majority of the women reporting that they have a bank account or any savings either in their own name or jointly in both provinces operate the account themselves. A small proportion of women in WHP (31.4%) and WSP (40.0%) have knowledge of a lending institution that helps women to start their own business.

Figure 3. Participation of women in economic activities



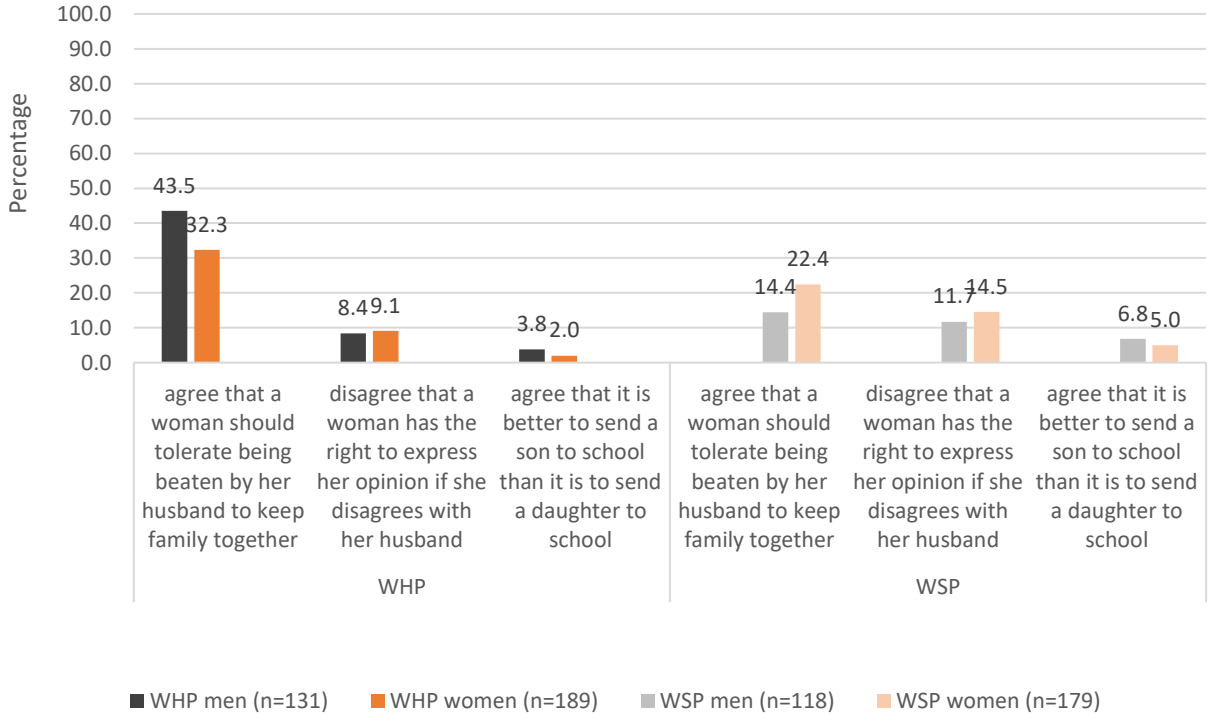
5. GENDER SOCIAL NORMS

All men and women in both WHP and WSP were asked a series of questions on gender social norms. The questions were intended to determine the level of acceptance of the harmful gender norms in each province. Three questions from the baseline study were repeated in this study which are presented in Section 5.2. The other three questions were new questions and the findings for these are presented separately in Section 5.1.

5.1 | Gender Social Norms in WHP and WSP

As seen in Figure 4, a small proportion of the sampled population of both men and women from both provinces agreed that a son's education should be favored over a daughter's education. In addition, a very small proportion of men (8.4%) and women (9.1%) in WHP disagreed that a woman has the right to express her opinion if she disagrees with her husband. An equally low proportion of men and women in WSP disagreed though slightly higher than their counterparts in WHP about a woman's right to express her opinion. When asked if a woman should tolerate being beaten by her husband to keep the family together, almost a third of the women (32.3%) agreed, while just under half the men (43.5%) in WHP agreed. In comparison, a lower proportion of men (14.4%) and women (22.4%) in WSP agreed with this statement.

Figure 4. Proportion of men and women who agreed with harmful gender norms



Uni- and multi-variate logistic regression analysis were conducted to identify relative associations with these two norms (Table 4). One analysis looked at factors associated with agreement with the harmful gender norm "women should tolerate being beaten to keep family together" and "women have a duty to have sex with their husband whenever he demands". The analysis examines those who agreed with these statements as unfavourable outcomes and the associations of these outcomes with socio-demographic factors.

Table 4. Socio-demographic factors associated with agreement with select gender norms

Socio-demographic factors	women should tolerate being beaten to keep family together		women have duty to have sex with husband when he demands	
	OR	**95% CI**	**OR**	**95% CI**
Age (years)				
18-24	1.00	-	1.00	-
25-29	0.79	0.46 - 1.38	0.80	0.47 - 1.36
30-34	0.62	0.33 - 1.17	0.90	0.50 - 1.61
35-45	**0.62***	0.35 - 1.10	0.74	0.43 - 1.28
Sex				
Men	1.00	-	1.00	-
Women	**0.72***	0.49 - 1.07	1.10	0.75 - 1.60
Level of Education				
Completed Elementary or no education	1.00	-	1.00	-
Completed Primary School	0.76	0.46 - 1.27	0.71	0.42 - 1.23
Completed High School	**0.47****	0.26 - 0.84	0.90	0.51 - 0.61
Completed Secondary School or college	**0.33****	0.17 - 0.63	0.57*	0.30 - 1.08
Marital Status				
Currently married living with husband/partner	1.00	-	1.00	-
Separated or divorced (with/without partner)	0.98	0.47 - 2.03	**0.50***	0.25 - 1.01
Single and never married	**0.56****	0.34 - 0.94	**0.37****	0.23 - 0.60
Has Disability				
No	1.00	-	1.00	-
yes	**1.51***	0.99 - 2.28	0.97	0.64 - 1.47
Province				
WHP	1.00	-	1.00	-
WSP	**0.38****	0.26 - 0.94	0.23**	0.16 - 0.33

Note: ** statistically significant at P<0.05, * borderline significant (p>0.05 but p<0.15)

As shown in Table 4, being single and never married (Odd ratio=0.56, CI=0.34-0.94), having completed secondary education (Odds ratio=0.47, , CI=0.26-0.84) or higher education (Odd Ratio=0.33, CI=0.17-0.63) and being from WSP (Odds Ratio=0.38, CI=0.26-0.94) were significantly protective when the participant agreed that "women should tolerate being beaten to keep family together". This means those who were single and never married, had a higher level of education and those who were from WSP were less likely to agree with this harmful

gender norm compared to those who were married, had elementary or no education and those from WHP. Borderline significance was also noted for being aged 35-45 years old and being a woman. These attributes were also negatively correlated with increased agreement with the harmful gender norm. Those with a disability were more likely to agree that "women should tolerate being beaten to keep family together."

The second model examined agreement with the harmful gender norm that it is a woman's duty to have sex with her husband when he demands. Those who were single and never married (Odds Ratio = 0.37, CI = 0.30-0.60) and from WSP (Odds Ratio = 0.23, CI = 0.16 – 0.33) were less likely to agree with this statement compared to those who were married and those who were from WHP.

5.2 | Gender Social Norms: Baseline Versus Endline Survey Findings

The perception of both men and women around a women's right to refuse sex, right of a woman who is sick to seek medical care freely without consent from her husband and a woman's right to refuse forced marriage by a family accepting a bride price were assessed in each survey.

Figure 5 below shows the percentages of men and women in WHP who agreed with the harmful gender norms highlighted and compared the finding with the baseline results. There were statistically significant decreases in the proportion of sampled men and women who agreed with the statement that a woman has a duty to have sex with her husband or partner whenever he demands. There was a highly significant decrease among men (94.2% to 54.2%, p-value <0.001) and women (92.9% (CI =88.0 - 96.3) to 74.2% (CI=69.9-82.3), p-value<0.001) from baseline to the follow-up survey. There was a statistically significant increase in the proportion of sampled men who agreed that a sick woman requires permission from her husband before seeking medical care (p<0.01). The proportion of women disagreeing remained unchanged. There was a statistically significant increase across surveys in proportion of both men (p<0.01) and women (p<0.05) who agree that a woman must marry a man if her family has accepted a bride price.

% of women and men in WHP who agree that a woman	Baseline (%)	95% CI	Endline (%)	95% CI	P-value
Women	**n=170**		**n=198**		
has a duty to have sex with her husband when he demands	92.1	88.0 - 96.3	76.6	(69.9-82.3)	p<0.001
who is sick needs permission from her husband to seek medical care	58.8	51.0 - 66.3	60.1	52.0 - 67.0	NS
must marry a man if her family has accepted a bride price	67.7	60.1 - 74.6	78.4	71.9-83.9	p<0.05
Men	**n=103**		**n=130**		
has a duty to have sex with her husband when he demands	94.2	87.7 - 97.8	54.2	45.6 - 63.4	p<0.001
who is sick needs permission from her husband to seek medical care	68.0	58.0 - 76.8	83.2	76.4 - 89.7	p<0.001
must marry a man if her family has accepted a bride price	62.8	52.6 - 72.1	81.5	73.8 - 87.8	P<0.01

Figure 6 below shows the percentages of men and women in WSP who agreed with the select gender norms compared with the baseline results. As with findings in WHP, there were statistically significant decreases recorded among both men and women who agreed that a

woman must have sex with her husband whenever he demands. Among women, the decrease was from 50.4% to 27.4% (p<0.001) while among men the decrease was from 70.8% to 39.0% (p<0.001). Decreases were also recorded among both men and women who agreed with the harmful norm that a woman must marry a man if her family accepts a bride price, however the increases were not statistically significant. Regarding sick woman seeking her husband's consent to access health care, there was a statistically insignificant increase among women agreeing with this gender norm.

% of women and men in WSP who agree that a woman	Baseline (%)	95% CI	Endline (%)	95% CI	P-value
Women	**n=133**		**n=172**		
has a duty to have sex with her husband when he demands	50.4	41.6 - 59.4	29.7	22.8 - 37.3	p<0.001
who is sick needs permission from her husband to seek medical care	43.6	35.0 - 52.5	57.0	49.2 - 64.5	P<0.05
must marry a man if her family has accepted a bride price	63.2	54.4 - 71.4	56.1	48.3 - 63.6	NS
Men	**n=72**		**n=117**		
has a duty to have sex with her husband when he demands	72.9	60.9 - 82.8	39.7	30.7 - 49.2	p<0.001
who is sick needs permission from her husband to seek medical care	51.4	39.3 - 63.3	52.1	42.7 - 61.5	NS
must marry a man if her family has accepted a bride price	66.7	54.6 - 77.3	64.1	54.7 - 72.8	NS

5.3 | Justification for Wife Beating

All sampled men and women in both WHP and WSP were asked whether they agreed or disagreed that a man is justified in hitting or beating his wife for various reasons. These questions were not asked in the baseline survey; thus, no comparison is made.

The proportion of men and women who agreed with a statement that a man is justified in hitting or beating his wife/partner for various reasons is shown in Figures 7 and 8 for WHP and WSP, respectively. Almost a quarter of the sampled men in WHP agreed that beating one's wife is justified if she refuses to have sex with her husband (25.9%), while just over half (50.1%) of women agreed. A higher proportion of women than men in WHP also agreed that a man is justified in hitting/beating his wife or partner if she goes out without telling her husband; if she argues with her husband; or if she neglects her children.

The level of disagreement between men and women in WSP is less, however for each of the reasons stated, more men tended to be against wife beating then their female counterparts. As shown in Figure 8, a small proportion of men (8.5%) and women (9.5%) believed that a man is justified in hitting his wife or partner if she refuses to have sex. Just over one-fifth of the men (22.9%) and almost one-third of the women (31.3%) stated that a man has the right to beat/hit his wife or partner for arguing with him. Similar to findings in WHP, more men (64.4%) and women (69.8%) agreed that a man is justified in hitting his wife if she neglects the children. More than half the women believed that a man has the right to hit/beat his wife/partner if she goes out without telling him (52.0%) or because he has paid a bride price for her (52.5%). In comparison, less than half of the men in WSP believed that a man has the right to hit/beat his wife or partner if she goes out without telling him (46.6%) or because he has paid a bride price for her (39.8%).

Figure 7. Proportion of respondents in WHP who agree that a man is justified in hitting or beating his wife/partner for various reasons

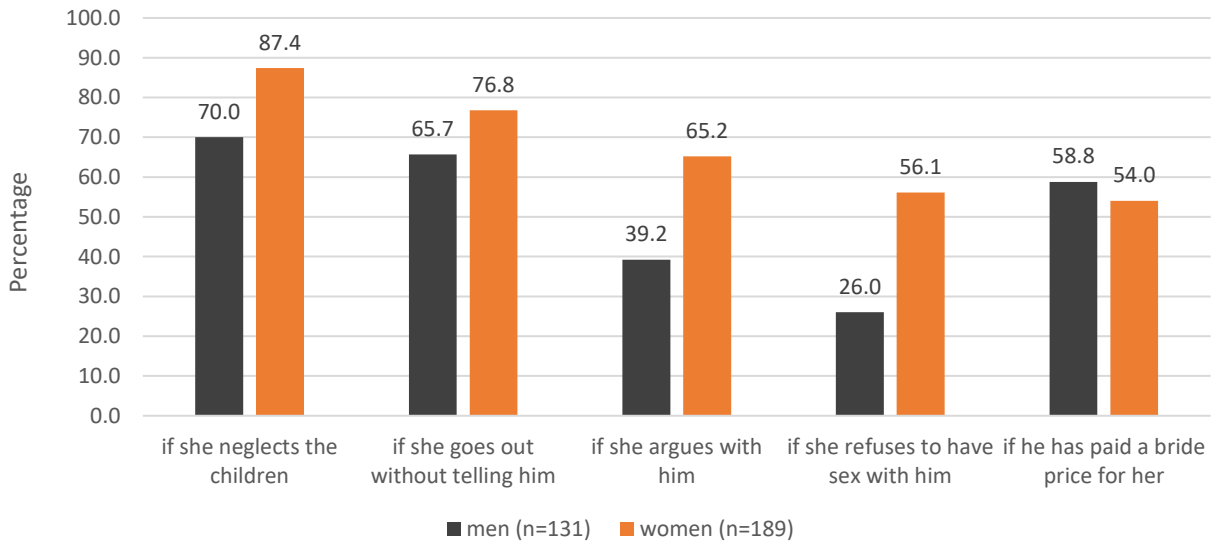
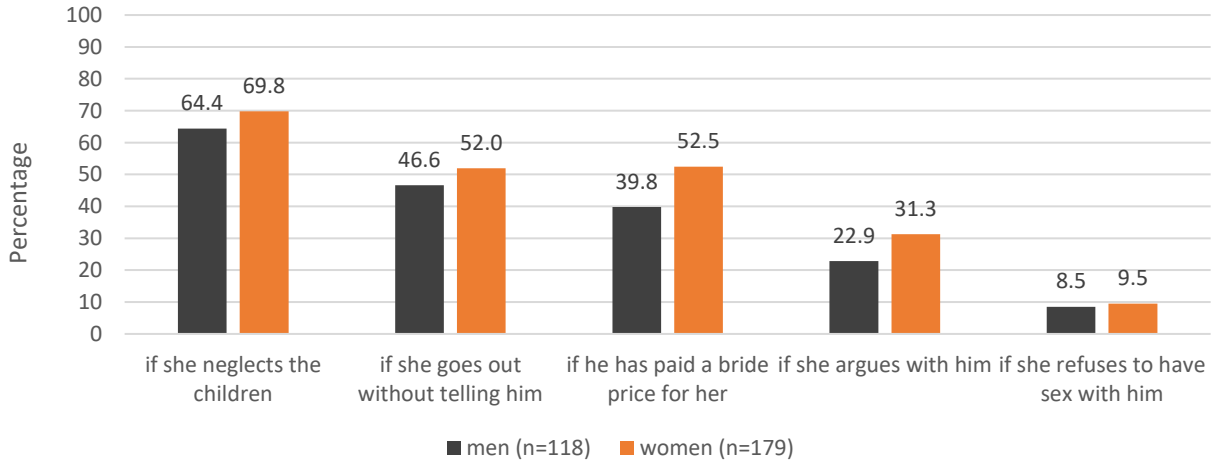


Figure 8. Proportion of respondents in WSP who agree that a man is justified in hitting or beating his wife/partner for various reasons



Multivariate Logistic regression analysis was conducted on two out of the five statements where more men and women agreed that a man was justified in beating his wife if she: 1) goes out without notifying her husband and 2) neglects her children (Table 5). The analysis focused on factors associated with agreeing that a husband is justified in beating his wife. For wife beating being justified if she goes out without informing husband, being female was positively correlated (Odd Ratio = 1.58, 95% CI = 1.09-2.30). Statistically significant risk factors negatively correlated with these justifications included being 30-34 years of age (Odd Ratio = 0.35, CI = 0.19-0.62), with high school (Odd Ratio = 0.55, CI=0.31-0.97) or higher education (Odd Ratio = 0.51, CI = 0.27-0.96) and being from WSP (Odd ratio=0.35, CI=0.24-0.51). This means those who

were aged 30-34 years of age were less likely to agree with the justification of wife beating for women going out without informing the husband compared to those who were aged 18-24. Similarly, those who high school education or higher were less likely to agree compared to those with elementary or no education and being from WSP compared to WHP.

Table 5. Socio-demographic factors associated with agreement with justification for wife beating

Socio-demographic factors	if she goes out without informing her husband		if she neglects her children	
	OR	95% CI	OR	95% CI
Age (years)				
18-24	1.00	-	1.00	-
25-29	0.92	0.54 - 1.56	**0.59***	0.33 - 1.05
30-34	**0.35****	0.19 - 0.62	**0.39****	0.20 - 0.74
35-45	0.68	0.40 - 1.17	**0.47****	0.25 - 0.87
Sex				
Men	1.00	-	1.00	-
Women	**1.58****	1.09 - 2.30	**1.69****	1.13 - 2.51
Level of Education				
Completed Elementary or no education	1.00	-	1.00	-
Completed Primary School	1.09	0.64 - 1.87	0.82	0.44 - 1.54
Completed High School	**0.55****	0.31 - 0.97	0.66	0.34 - 1.28
Completed Secondary School or college	**0.51****	0.27 - 0.96	**0.40****	0.20 - 0.81
Marital Status				
Currently married living with husband/partner	1.00	-	1.00	-
Separated or divorced (with/without partner)	0.67	0.33 - 1.36	1.10	0.49 - 2.50
Single and never married	0.93	0.58 - 1.48	**0.57****	0.34 - 0.94
Has Disability				
No	1.00	-	1.00	-
yes	1.08	0.71 - 1.63	1.35	0.84 - 2.19
Province				
WHP	1.00	-	1.00	-
WSP	**0.35****	0.24 - 0.51	**0.50****	0.34 - 0.94

Note: ** statistically significant at P<0.05, * borderline significant (p>0.05 but p<0.15)

On the second model looking at wife beating for neglect of children, the statistically significant risk factors include positive correlation with being female (Odd Ratio = 1.69, CI = 1.13-2.51) and negative correlations with being aged 30 -34 (odds ratio = 0.39, CI = 0.20-0.74) and aged 35-45 (Odd ratio = 0.47, CI = 0.25-0.87), having secondary or college education (Odds Ratio = 0.40, CI=0.20-0.81), being single and never married (Odds ratio= 0.57, CI=0.34-0.94) and being from WSP (Odds Ratio = 0.50, CI = 0.34-0.75). As with the first justification for wife beating, those who were female were more likely to agree compared to male, whereas those who were aged 30-34, or 35-45 and those with secondary or college education, single and never married as well as those who were from WSP were less likely to accept wife beating if the wife neglected her children.

6. PERSONAL EXPERIENCE OF GBV

This chapter discusses the experiences of both men and women as either perpetrators or survivors of GBV. The questions on GBV experience were focused on the main types of GBV, including rape, physical assault, psychological/emotional violence, physical assault when pregnant and forced to perform other sexual acts. Prevalence and incidence of IPV by type of GBV experienced by women and reported by men as perpetrators is presented in Section 6.1 and 6.2, respectively. Prevalence and incidence of physical and sexual violence within marriage were compared with the baseline survey and are presented in section 6.3.

6.1 | Prevalence and Incidence of IPV experience by Women

The prevalence of various forms in both WHP and WSP follows similar patterns ranging from forced to perform other sexual acts with lowest prevalence to psychological or emotional violence with highest prevalence in both provinces. Just over half of women in WHP (50.0%) and WSP (56.6%) have *ever* been forced to have sex by their husbands or partners. Figure 9 shows the prevalence of various types of GBV experienced by women in both WHP and WSP.

Figure 9. Prevalence of intimate partner violence experienced by women by type of IPV and by Province

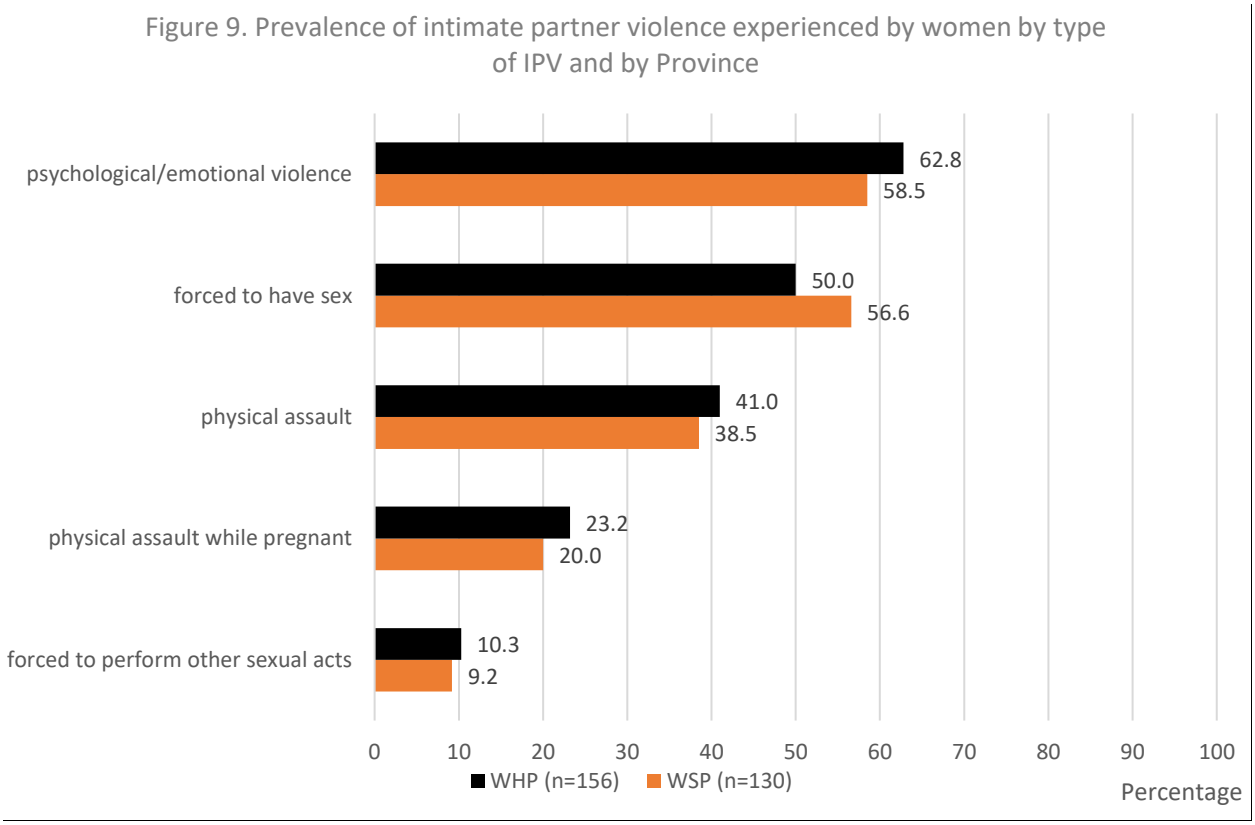
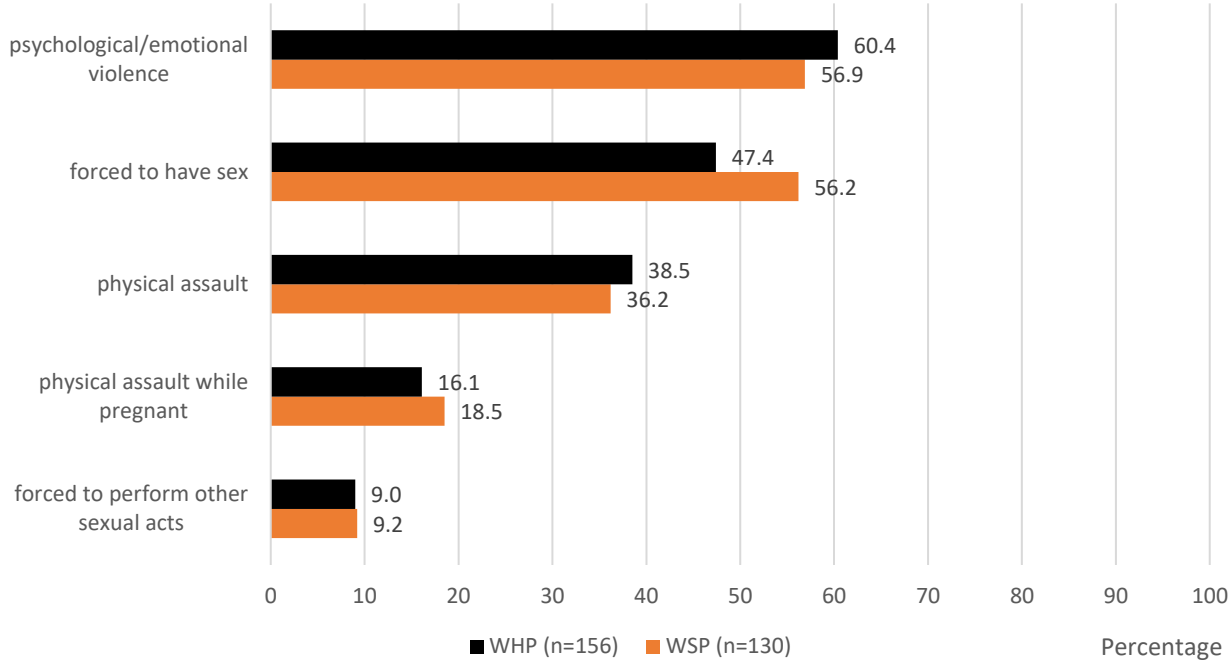


Figure 10 shows the incidence rate of various types of GBV experienced by women in both WHP and WSP. Incidence rates ranged from lowest for "being forced to perform other sexual acts" to

highest for “psychological/emotional violence “in both provinces. The incidence of psychological or emotional violence (60.4%) and physical assault (38.5%) among women in WHP was slightly higher than that of women in WSP (56.9% and 36.2%, respectively). The incidence of forced sex among women in WSP (56.2%) was slightly higher compared to that among women in WHP (47.4%).

Figure 10: Incidence of intimate partner violence experienced by women by type of IPV and by Province



Multivariate logistic regression was performed on two of three most common types of IPV experienced by women, namely sexual and physical violence. As shown in Table 6, the first model on incidence of physical violence in marriage, there was a positive correlation with being divorced or separated (Odds Ratio = 4.62, CI = 0.90-23.70) being a woman who completed primary school education (Odds Ratio =0.25, $p<0.01$) and high school education (Odds ratio = 0.26, $p<0.1$). Those who completed secondary or college education (Odd Ratio= 0.26, $p<0.1$) were significantly less likely to have incidence of physical violence compared to those with elementary or no education. Women who were aged 30-34 years and who were not in a polygamous marriage were less likely to experience physical assault; however, this was not statistically significant. In addition, women who decided jointly with their husband to work to earn money and women who jointly operated a bank account were significantly less likely to experience physical assault at borderline statistical significance.

Factors that were positively correlated with marital rape included women being aged 35-45 years old compared to those aged 18-24 and women who had some form of disability (Odd Ratio = 2.46, $p<0.05$) compared to those with no disability. Women who decided jointly with

their husband to work to earn money were less likely to experience forced sex. Women who decided jointly with their husband on health care seeking were 4.4 times more likely to experience forced sex compared to those who decide on their own; however, this was not statistically significant.

Table 6. Socio-demographic and other factors associated with incidence of physical and sexual violence among women

Socio-demographic and other factors	Physically Assaulted by husband/partner		Raped by husband/partner	
	OR	95% CI	OR	95% CI
Age (years)				
18-24	**1.00**	-	1.00	-
25-29			2.19	0.71 - 6.78
30-34	**0.45**	**0.13 - 1.47**		
35-45			**2.53***	**0.95 - 6.73**
Level of Education				
Completed Elementary or no education	**1.00**	-		
Completed Primary School	**0.25***	**0.05 - 1.23**		
Completed High School	**0.26***	**0.06 - 1.17**		
Completed Secondary School or college	**0.26***	**0.05 - 1.26**		
Marital Status				
Currently married living with husband/partner	**1.00**	-		
Separated or divorced (with/without partner)	**4.62***	**0.90 - 23.7**		
Has Disability				
Yes			**2.46***	0.94 - 6.41
No			1.00	-
Polygamy				
not married	**1.00**	-		
only wife of husband	0.46	0.18 - 1.21		
Makes decision in seeking health care				
She decises on her own			1.00	-
she decises jointly with her husband			4.41	0.84 - 23.06
Makes decision to work to earn money				
She decises on her own	1.00	-	1.00	-
she decises jointly with her husband	**0.10***	**0.01 - 1.06**	**0.27***	**0.05 - 1.42**
Operates a Bank Account				
does not operate an account	1.00	-		
operates jointly with her husband	**0.12***	**0.01 - 1.41**		

Note: ** statistically significant at P<0.05, * borderline significant (p>0.05 but p<0.1)

6.2 | Incidence and Prevalence of IPV Perpetrated by Men

Figure 11 shows the prevalence of various types of GBV perpetrated by men as reported by men in both WHP and WSP. Similar to the findings among women, the type of GBV with the highest prevalence of perpetration among men in both WHP (61.3%) and WSP (65.1%) was

psychological or emotional violence. As found among women, being forced to perform other sexual acts was the type of GBV with the lowest prevalence of perpetration by men (11.3% in WHP and 6.4% in WSP). Reported perpetration of physical assault on a wife or partner by men was generally in sync with the prevalence of physical assault survived by women reported above (Figure 9). On the other hand, the reported perpetration of forced sex among married men was lower in WHP (27.4%) and WSP (20.6%) compared to rates reported by women (see Figure 9).

Figure 11. Prevalence of intimate partner violence perpetration among men by type of IPV and by Province

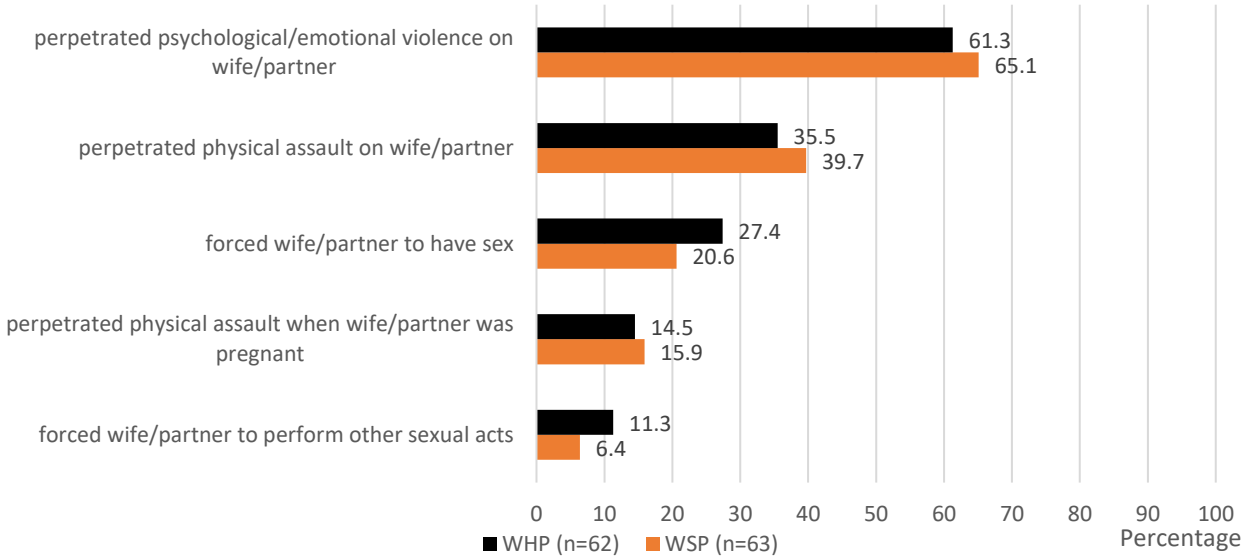
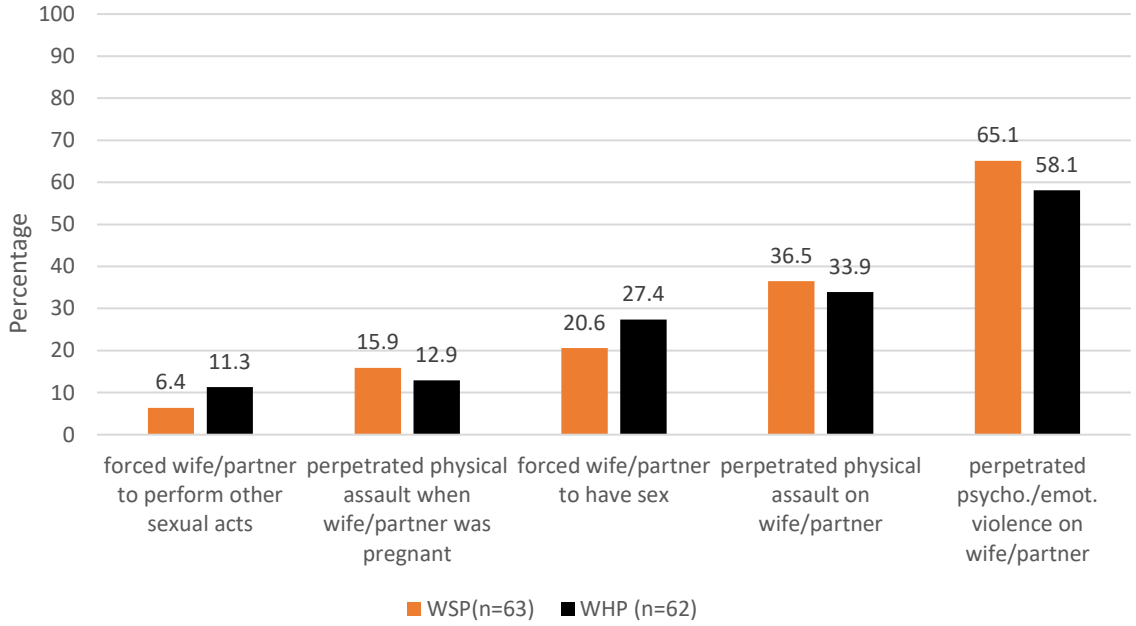


Figure 12 shows the incidence rate of GBV types perpetrated by men in both WHP and WSP. As with the prevalence calculation, the total number of men who were currently or previously married or currently in relationship with a woman were included as denominators. There is little difference in incidence of various forms of GBV perpetration by men between WHP and WSP.

Incidence of perpetration of intimate partner violence reported by men in both provinces for each type of GBV are within similar rates reported by women, with the exception of forced sex where there is a large discrepancy between what women report they experienced in the last year and what men report they perpetrated in the last year (see Figure 10).

Figure 12. Incidence of intimate partner violence perpetration among men by type of IPV and by Province

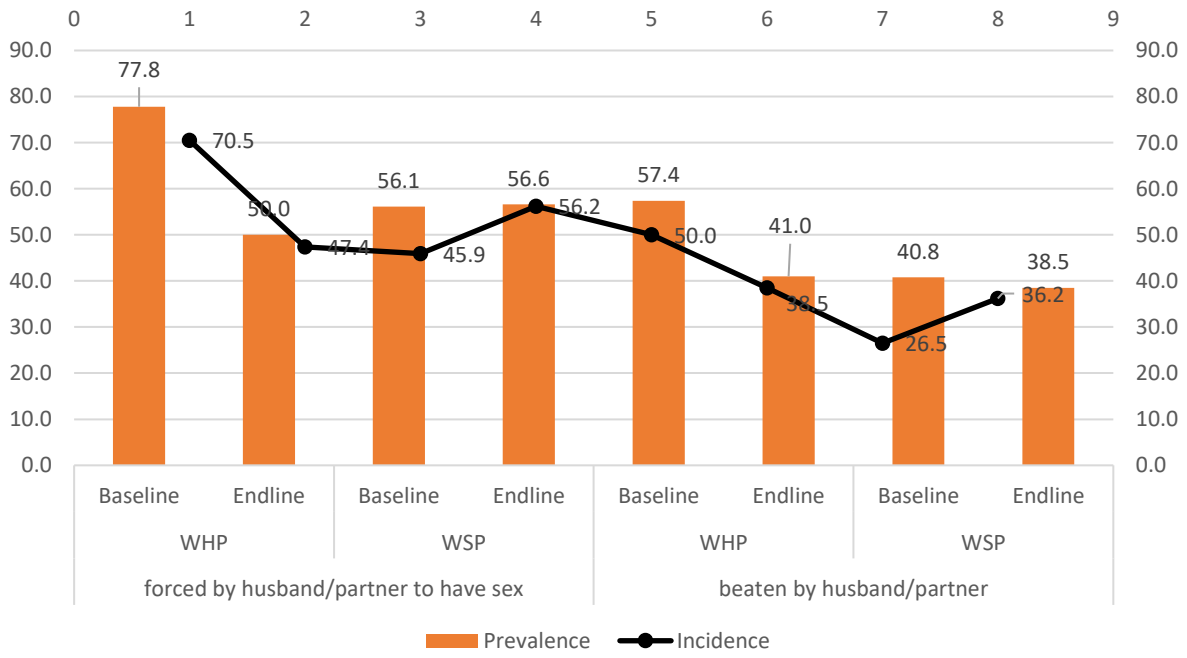


6.3 | Prevalence and Incidence of IPV: Baseline Versus Endline

The same denominators (n) were used to calculate both prevalence and incidence of IPV experienced by women. The denominators for the endline survey in WHP and WSP are the same as those used in Figure 10. The denominators for the baseline survey were as follows: n=122 women in WHP, n=98 women in WSP. The endline survey found a statistically significant ($p<0.001$) decrease in the prevalence of marital rape experienced by women in WHP (50.0%) compared to baseline (77.9%). As shown in Figure 13, the prevalence of physical assault within marriage decreased from 50.0% to 38.5% ($p<0.01$) from baseline to endline in WHP. In WSP, there was a slight decrease in prevalence of physical violence, which was not significant and the prevalence of rape within marriage remained unchanged.

The incidence of marital rape also dropped significantly in WHP from 70.5% during baseline to 47.4% at endline ($P<0.001$). As also shown in Figure 13, the incidence of IPV among women in WSP increased during the endline mirroring the increase in prevalence of IPV shown above. These differences were not statistically significant.

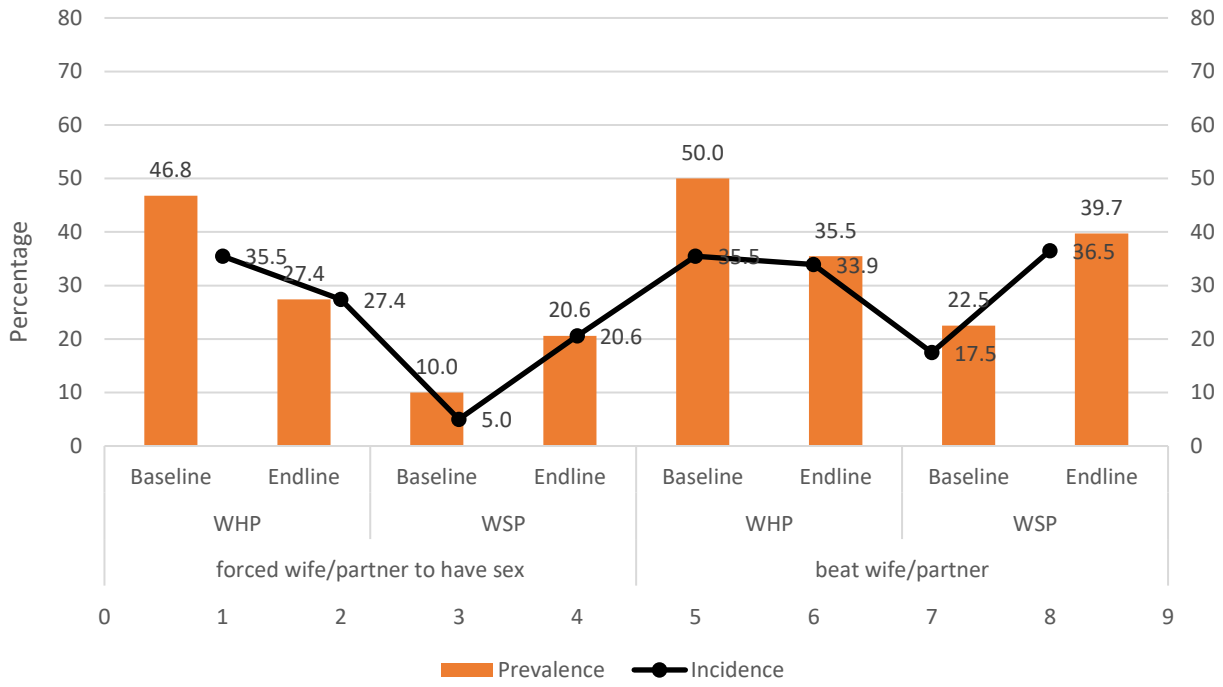
Figure 13. Incidence Vs Prevalence of Intimate Partner Violence experienced by women: Baseline Vs Endline Surveys



The same denominators (n) were used to calculate both prevalence and incidence of IPV perpetrated by men. The denominators for endline survey among men in WHP and WSP are the same as those used in Figure 12. The denominators for baseline survey were as follows: n=62 men in WHP and n=40 men in WSP.

The proportion of men who ever reported perpetrating forced sex on their wives or partners dropped in WHP to 27.4% from 46.8% at baseline, which was statistically significant ($p<0.05$). As shown in Figure 14, prevalence of physical assault perpetrated within marriage in WHP also decreased—from 50.0% at baseline to 35.5%, however, this was not statistically significant. The decreases in the number of men who were perpetuators of GBV in WHP are consistent with the decreases reported by women (see Figure 13). The prevalence of perpetration of forced sex and physical violence within marriage increased among men in WSP, though these increases were not statistically significant.

Figure 14. Incidence Vs Prevalence of Intimate Partner Violence perpetration by men: Baseline Vs Endline Surveys



The endline survey also measured a decrease in incidence of perpetration of forced sex within marriage as reported by men in WHP. Findings are similar to reports by women. Forced sex within marriage in WHP significantly decreased from 46.8% to 27.4% ($P<0.05$). As shown in Figure 14, slight decreases in incidence of physical violence were reported by men in WHP whereas men in WSP reported increases in perpetration of forced sex and physical violence within marriage. These increases were not statistically significant. The increase in incidence of perpetration of IPV in WSP is consistent with increases in incidence reported by sampled women.

6.4 | Experiences of Rape among Women

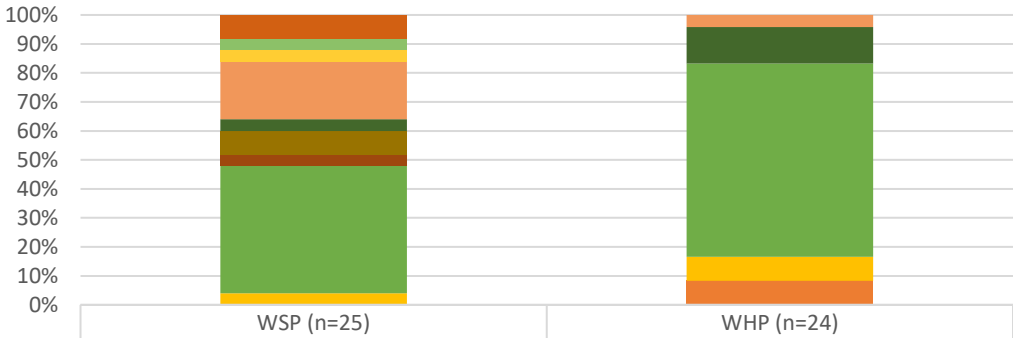
All women in both WHP and WSP, including those who were single and never married were asked if they were ever raped, defined as anyone forcing them anytime in their life—as a child or as an adult—to have sexual intercourse or perform any other sexual acts when they did not want to. The prevalence of rape experienced by women in WSP was slightly higher (14.0%) compared to that of women in WHP (12.1%).

In the endline, the question on forced sex was not asked in the same way as in the baseline so it was not possible to compare findings. In the baseline survey, the researchers asked if women experienced rape by any men other than their husbands or partners, whereas in the endline survey, the question was "At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you

did not want to?". The question to establish incidence of rape was not asked in the endline survey.

Respondents who experienced rape at any time in their lives were asked to report the perpetrator of the first violence they experienced (Figure 15). The majority of the women in WHP (66.7%) and WSP (44.0%) reported current/former boyfriends as the main perpetrators. The next most common perpetrator in WHP were former/current husband/partner (16.6%), followed by their in-laws (12.5%). Women in WSP reported that their friend/acquaintance (20.0%) were also perpetrators of rape followed by others/other relative (8.0%).

Figure 15. Distribution of the main perpetrators of rape experienced by women



	WSP (n=25)	WHP (n=24)
Other	8.0	0.0
stranger	4.0	0.0
family friend	4.0	0.0
own friend/acquaintance	20.0	4.2
in-law	4.0	12.5
Other relative	8.0	0.0
brother/step-brother	4.0	0.0
current/former boyfriend	44.0	66.7
former husband/partner	4.0	8.3
current husband/partner	0.0	8.3

6.5 | Experiences of Physical Assault among Men

Men were also asked if they had ever been physically assaulted by their wives or partners and whether this happened in the past 12 months. The prevalence of married men experiencing physical assault from women was 30.6% (n=62) in WHP and 11.1% (n=63) in WSP. The same proportion of married men reported that they were physically assaulted by their wives/partners in the last 12 months (incidence).

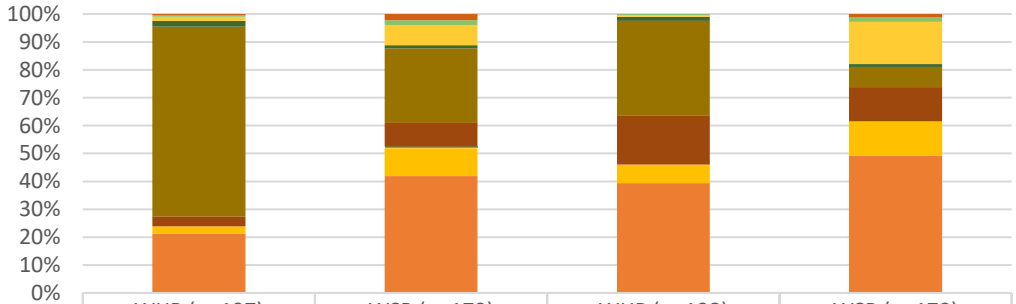
7. AWARENESS OF GBV SERVICES

This chapter presents the level of knowledge and awareness of the services where the survivors of GBV would go to find assistance if they experience GBV. Both the men and women sampled were asked the same questions. Separate sub-sections below discuss the level of knowledge among sampled women and men.

7.1 | Awareness of Services among Women

Women were asked where they would go first to seek help if they experience either rape by anyone or physical assault from their husband/partner. According to results shown in Figure 16, over two thirds of women in WHP mentioned either medical services or a family support centre (70%) followed by police (21.3%). More women in WSP reported that they would go to police (41.9%) first to seek help if they experienced rape and 27.9 % of them reported that they would seek either medical services or access a family support centre first. Just over two-thirds of women in WSP reported that they would seek medical services or go to the police first if they experienced rape compared to roughly 89% of women in WHP. A good number of women in WSP reported that they would go to other people first when they experienced rape, including village courts (10%), village leaders (8.4%) or family/relatives and friends (9.0%).

Figure 16. Women's knowledge of where they would go first to seek help for the two common types of GBV



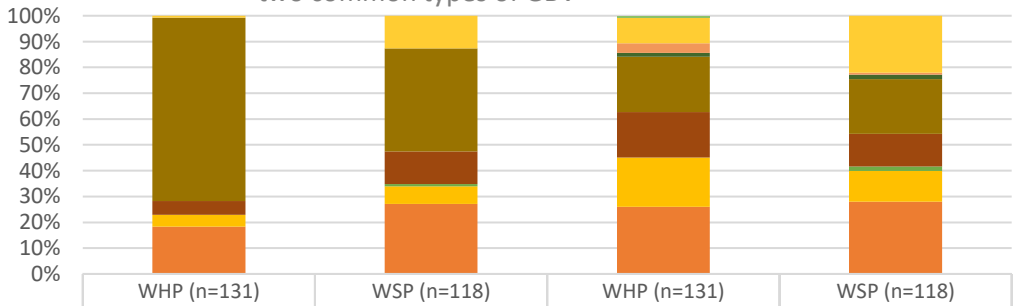
	WHP (n=197)	WSP (n=179)	WHP (n=198)	WSP (n=179)
	if raped by someone		if beaten by husband/partner	
don't know	0.5	2.2	0.0	1.1
friends or relatives	0.5	1.7	0.5	1.7
family or relatives	1.5	7.3	0.5	15.1
church/priest	0.0	0.0	0.0	0.0
family support centre	2.0	1.1	1.5	1.1
medical service	68.0	26.8	33.8	7.2
village leader	3.6	8.4	17.7	12.3
social workers	0.0	0.6	0.0	0.0
legal service	2.6	10.0	6.6	12.3
Police	21.3	41.9	39.4	49.2

As also shown in Figure 16, the bulk of the sampled women in WHP reported that they would seek help from either police (39.4%) or medical service (35.3%) including a family support centre first if beaten by their husband. Besides police and medical services, 17.7 % and 6.6 % the women reported that they would rather go to the village leader or village courts first if they experience physical violence. Almost half of the women in WSP (49.2%) reported that they would seek help from the police first if beaten by their husband while the remaining half were spread between family and relatives (15.1%), village courts (12.3%), village leaders (12.3%) and medical services or family support services (8.3%).

7.2 | Awareness of GBV Services among Men

Men were asked where women would go first to seek help if they experienced either rape by anyone or physical assault from their husband/partner (Figure 17). An overwhelming majority of men in WHP mentioned either medical services (71%) followed by police (18.3%). Men in WSP had mixed knowledge of where women would go first to seek help if they experienced rape with most of the men opting for medical service (39.8%), followed by police (27.1%) then family or relative (12.7%) and village leaders (12.7%). When asked where a woman should go first to seek help if beaten by her husband or partner, men in WHP mentioned Police (26.0%) and medical services or a family support centre (22.9%), followed by village courts (19.1%) and village leader (17.6%), while men in WSP said police (28%) followed by family or relatives (22.0%) and medical service (e.g. FSC) (22.9%), village leaders (12.7%) and village courts (11.9%).

Figure 17. Men's knowledge of where a women should go first to seek help for the two common types of GBV

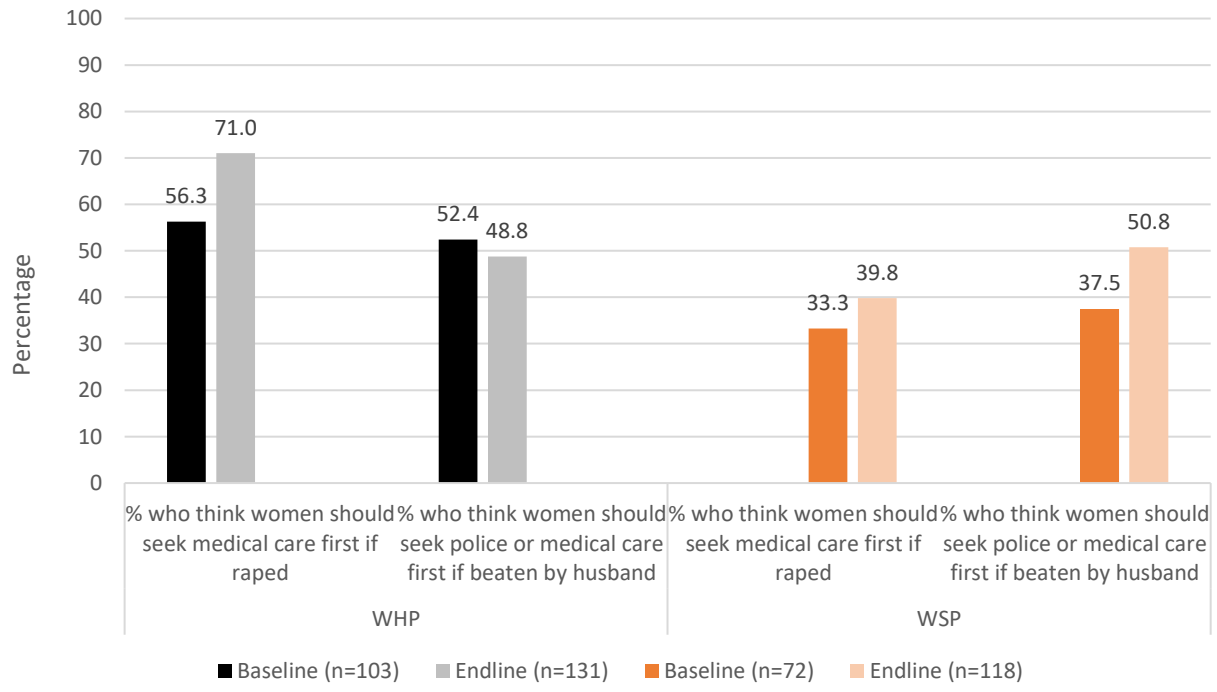


	WHP (n=131)	WSP (n=118)	WHP (n=131)	WSP (n=118)
	if raped by someone		if beaten by her husband/partner	
friends or relatives	0.0	0.0	0.7	0.0
family or relatives	0.8	12.7	9.9	22.0
church/priest	0.0	0.0	3.8	0.8
family support centre	0.0	0.0	1.5	1.7
medical service	71.0	39.8	21.4	21.2
village leader	5.3	12.7	17.6	12.7
social workers	0.0	0.9	0.0	1.7
legal service	4.6	6.8	19.1	11.9
Police	18.3	27.1	26.0	28.0

7.3 | Knowledge of Services for Women who Face GBV: Baseline Versus Endline

Women were asked during the baseline where they would go first if they were violated by their husband or other partners. In the endline survey, women were specifically asked where they would first seek help if raped by anyone and if they experienced physical assault from their husband or partner. It was thus not possible to compare findings among women. However, for the men, the same specific questions were asked in both the baseline and endline surveys (Figure 18). There was increases in correct knowledge among men in WHP and WSP about where a woman should go first if raped. Among men in WHP 56.3% of sampled men mentioned medical care during the baseline and this changed to 71% during the endline, with borderline statistical significance (P=0.063). Correct knowledge also increased among men in WSP; however, not statistically significantly.

Figure 18. Men's knowledge of where a women should go for help if either raped or physically assaulted by husband/partner



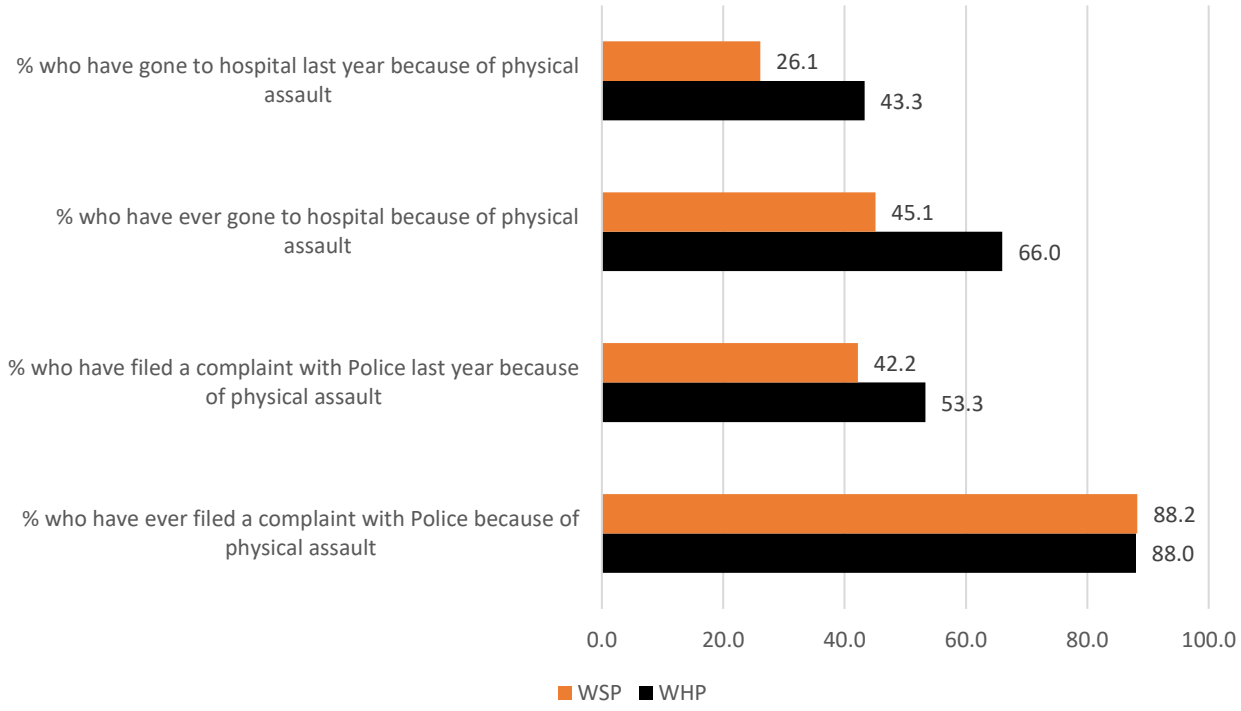
8. UPTAKE OF GBV SERVICES BY SURVIVORS

Women in both provinces were asked if they ever reported incidences of either physical assault or rape to police and whether this has happened in the past 12 months and if they ever accessed medical care services for either physical assault or rape and whether this occurred in the past 12 months. Findings are discussed under sub-sections 8.1 and 8.2.

8.1 | Response among Survivors of Physical Assault

An overwhelming majority of the women in WHP (n=50) and WSP (n=51) who have ever experienced physical assault filed a complaint with police (Figure 19). Of those who ever did so, 53.3% of women in WHP (n=45) and 42.2% of women in WSP (n=45) did so in the past 12 months. More women in WHP (66.0%) compared to WSP (45.1%) reported ever accessing medical care following physical violence. Of the women who accessed medical care for physical assault 43.0% in WHP and 26.1% of in WSP did so in the past 12 months.

Figure 19. Care Seeking Behaviour among Physical Assault Survivors

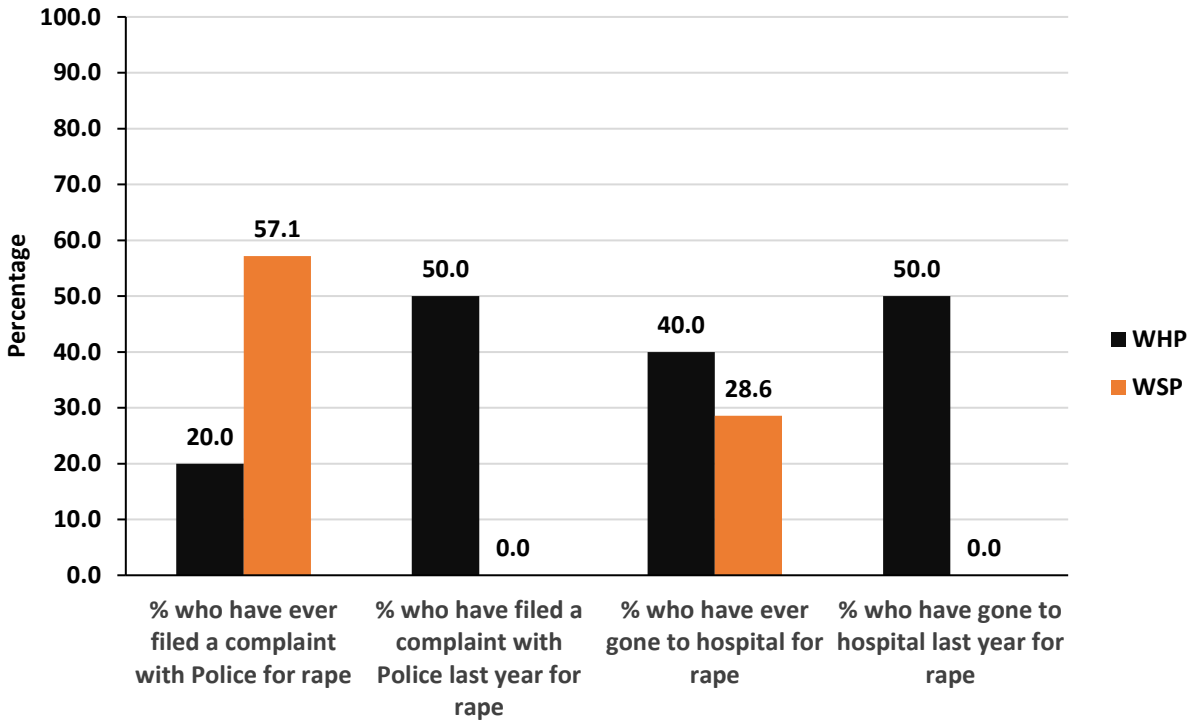


8.2 | Response among Survivors of Rape

Only (1) of (5) women in WHP and just over half the women in WSP (4/7) who reported having ever experienced rape filed a complaint with police. However, when women were asked if this has happened in the past 12 months, only one of two women in WHP and none of the women in WSP who reported experiencing rape in the past 12 months indicated that they reported the incident to police. Two of the five sampled women from WHP who reported ever having

experienced rape indicated accessing health care services whereas only one of the two who reported experiencing rape in the past 12 months accessed medical care. Of the two women in WSP who reported having experienced rape in the past 12 months, neither accessed police nor medical services. These women who reported ever experiencing rape or having been raped in the last 12 months do not include the more than 50 married women who reported forced sex within marriage.

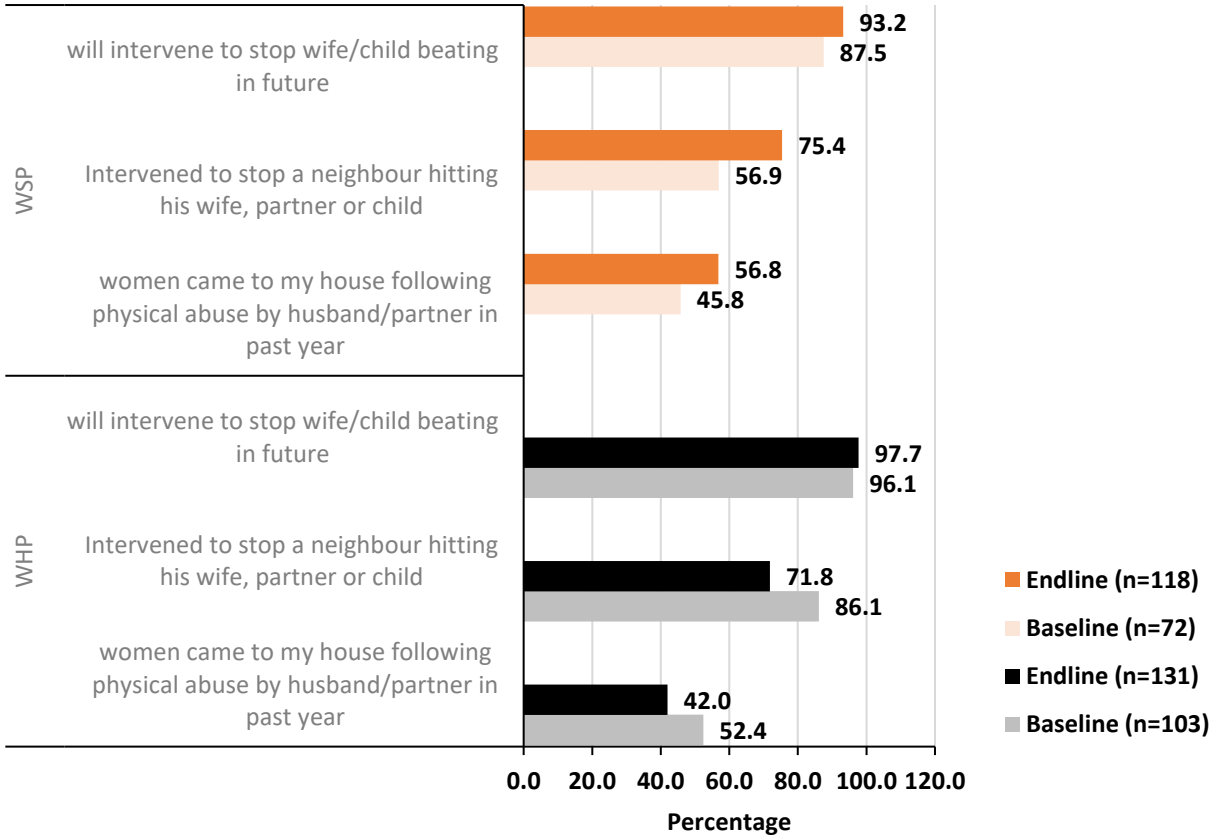
Figure 20. GBV Service Seeking Behaviour among Survivors of Rape



8.3 | Role of Men in abating Violence against Women and Children

Men were asked questions relating to their involvement in preventing physical assault, providing shelter as well as their willingness to prevent GBV in the future (Figure 21). A good proportion of men in WHP (42.0%) and WSP (56.8%) reported that women and children came to them for protection when they faced physical assault. Approximately three quarters of men in WHP (71.8%) and WSP (75.4%), reported that they had intervened to stop a wife and child being beaten by their husbands and fathers, respectively. There is an overwhelming willingness among men in WHP (97.7%) and WSP (93.2%) to intervene in the future if they see a wife or child of their 'neighbours' being beaten.

Figure 21. Involvement of men in abating GBV: Baseline Vs Endline



8.4 | Involvement of Men in Abating GBV: Baseline versus Endline

When compared with the baseline, the involvement of men in abating physical abuse increased among men in WSP for all three areas measured (Figure 21). There was a statistically significant increase to 75.4% from baseline (56.9%) in men in WSP intervening to stop a neighbor hitting his wife or child (P<0.001). There was also a statistically significant drop to 71.8% from baseline (86.1%) among men in WHP who reported intervening to stop a man beating his wife or child (p<0.05). More than half the sampled men in WSP (56.8%) reported that women and children came to them for help following physical abuse by their husband/partner or father in the past 12 months compared to 45.2% during the baseline. This difference was not statistically significant.

9. DISCUSSION

9.1 | Limitations of the Study

Although the refusal rate for men in both WHP (1.5%) and WSP (11.3%) were within the 12% expected range used to calculate the sample size whereas for the women, only WHP (6.6%) was within the anticipated 8% rate. In WSP, the refusal rate among women was 15.6%. The survey team could not rectify this as the protocol restricted replacements for any refusals; therefore, the sample size for WSP was lower than expected. Accordingly, the findings may be distorted to a certain extent for women in WSP as a certain group of women with similar characteristics could have opted to participate while another group may have declined.

The majority of the questions asked in the baseline were not repeated in the 2018 study as these questions were not standard GBV questions. Thus, data from only a few key indicators have been used to make comparisons with the baseline study to assess the effectiveness of the interventions. There are a couple of other indicators which have been compared with caution as there were slight differences in the questions from baseline to endline.

Furthermore, the baseline study was conducted about a year and a half after the project had commenced intervention implementation. The results were believed to have been influenced by the project and could therefore distort the outcome of comparisons with the baseline survey.

The main limitation is that the study was cross-sectional in design, thus providing weaker evidence that the observed differences between the baseline and endline survey results were due to the intervention. As such, the results should be used with caution when making conclusions.

9.2 | Discussion of Findings

The primary objective of this study was to assess the effectiveness of the KLOM project in reducing the incidence of psychological, sexual and physical violence experienced by women at the hands of men. Reducing GBV is a minimum requirement for the achievement of gender equality as per the Sustainable Development Goals (SDG), which also recognize the integrated nature of gender programming. SDG 5 calls for the achievement of gender equality and the empowerment of all women and girls. The nine targets for this SDG measure important opportunities and inputs for equality – shared responsibility in the home, leadership and participation in decision-making at all levels, access and control over sexual and reproductive health services and decisions, equal rights to critical resources, such as employment and financial services, access to technology and government funding for gender equality. Inclusive and equitable education is such a critical asset that it stands alone as SDG 4: ensuring gender equality across all levels of education and learning.

In addition to key opportunities and inputs for gender equality, SDG 5 measures the most significant barriers and obstacles to gender equality including discrimination, harmful practices,

such as early and forced marriage and all forms of GBV whether occurring in public or private life. Given the two KLOM studies' limitations noted above, we focus primarily on what the most recent study suggests in terms of program effectiveness. Assessing program effectiveness requires measuring women (and girls') access to critical assets for empowerment, measuring their participation and control over their own lives and decision making and assessing experiences of GBV and the ways in which it reinforces inequitable norms and hinders the attainment of gender equality.

Indicators of Empowerment: Common indicators of empowerment include participation in household decision making, including decisions regarding a woman's own healthcare, use of contraception and household spending (Kishor, S. and Subaiya, L. 2008). These indicators are used as proxies for women's broader control over their own lives (Malhotra, A. and S.R. Schuler. 2005). This study's findings show that decision-making skews in men's favor, with WHP reporting more conservative views. Interestingly, there is disagreement between men and women regarding who is making decisions. Most women report making the decision regarding their own health care while the majority of men report that they make decisions regarding their partner's health care. Overall, men report that more decisions are made jointly than the women report. For women, the decisions regarding children were more apt to be made jointly than other decisions and for women in WHP these were the only decisions for which they reported joint decision-making. Both men and women report that more men are involved in making decisions regarding a woman's use of contraception.

Access and Control Over Economic Assets: Access to economic opportunities and assets increases women's empowerment, improves their health and their children's health, increases their bargaining power within the household and supports more equitable and less abusive relationships (World Bank. 2012; Doss, C., C.D. Deere and C. Grown, 2009). For the most part, attitudes and practices align in the KLOM study with regards to women's economic empowerment. Roughly equal percentages of women and men decide on their own whether women will work for money. While women were not asked about involvement in decisions regarding spending men's money, more than half of men in both provinces report that women are involved in these decisions. A third to 40% of women know a lending institution that helps women to start their own business. And most importantly, roughly two thirds of all women say that they have money that they alone can decide how to use. Nearly 40% of all the women stated that they had a bank account on their own or jointly with their male partner and more than 80% of them stated that they were the ones in control of the bank account. This is important because our study found that the women who have their own or a joint account with their husband/partner are *six times less likely to experience IPV*.

Of concern are the very small percentages (under 30%) of women who report being members of an association that holds regular meetings. Women's empowerment theory and practice has long highlighted the duality of individual and collective agency and especially highlighted the need for collective empowerment in more communal societies. These generally small groups of

women come together to share their experiences which destroys the isolation that men often use to maintain authority and supremacy.

Whether these groups are called “consciousness raising groups” or “women’s self-help groups” they serve a critical function from raising women’s awareness about their rights to taking collective action (Stromquist, N.P., 1995) and are generally seen as the first step toward women’s empowerment (Stromquist, N.P., 2015). While women’s consciousness raising groups in the West generally did not have a savings or economic empowerment aspect, women’s self-help groups in developing countries often do and may combine economic empowerment with other aspects of empowerment, including literacy, reproductive health and advocacy (Huis MA, Hansen N, Otten S and Lensink R 2017). With nearly half to three-quarters of men and women in the study agreeing a man is justified in beating his wife if she goes out without telling him, using savings or microfinance as the reason for attending a small group has often been found to be most effective and least threatening for getting women safely out of the house.

Our study, as noted above, also confirmed the protective effect of women’s economic empowerment finding that women who have their own or a joint account with their husband/partner are six times less likely to experience IPV. Women’s financial autonomy, employment and access to economic assets are critical to women’s empowerment and have an established relationship with IPV, which can work both ways as found in the cross-national study by Heise and Kotsadam: “Especially predictive of the geographical distribution of partner violence are norms related to male authority over female behaviour, norms justifying wife beating and the extent to which law and practice disadvantage women compared with men in access to land, property and other productive resources… partner violence is less prevalent in countries with a high proportion of women in the formal work force, but working for cash increases a woman’s risk in countries where few women work.” (Heise L and Kotsadam A, 2015). While women’s economic empowerment can lead to overall empowerment for women and improvements in their families health and well-being, in conservative communities such as those in PNG it must be partnered with intensive work to change the underlying harmful norms giving rise to IPV - including practices such as payment of bride price that reduce women to property - and tied to national level advocacy for change in laws regarding inheritance and access to productive resources.

Reproductive Health: Access to contraception and the ability and control to determine if, when and how often to have children is critical to women’s self-determination and empowerment. Women’s empowerment has long held that women cannot have control over their lives if they do not have control over their own bodies. Measurements of women’s empowerment usually include questions on a woman’s right to refuse sex or request the use of a condom as an indicator of gender equality (Head, Sara K., Sally Zweimueller, Claudia Marchena and Elliott Hoel, 2014). While this study did not ask about contraceptive use, it did ask about contraceptive decision making and the right to refuse sex. Overall more women and men report that men alone make the decision about whether a woman will use contraception, with more women

than men reporting that men alone make the decision. Men and women in WSP roughly agreed on the levels of joint decision making, whereas men in WHP report much higher joint decision making than women. The majority of men and women in WHP believe that a woman has a duty to have sex with her husband while roughly a third of women and men in WSP also agree. This has important implications for how and what type of contraception can be offered to women, particularly given the very high levels of reported rape within marriage and studies showing that women who experience IPV may be half as likely to use of contraception (Maxwell L, Devries K, Zionts D, Alhusen JL, Campbell J (2015).

Factors Associated with IPV: Looking specifically at IPV, an analysis of data from ten countries in the WHO Multi-country Study on Women's Health and Domestic Violence focused on identifying factors that are consistently associated with abuse across sites (Abramsky et al., 2011). They found that there were many factors which affected IPV risk in similar ways (in terms of risk and protection) across sites. Protective factors included completion of secondary education, high socio-economic status and formal marriage. Factors found to increase risk were: alcohol abuse, cohabitation, young age, attitudes supportive of wife beating, having outside sexual partners, experiencing childhood abuse, growing up with domestic violence and experiencing or perpetrating other forms of violence in adulthood. The study further found that the strength of the association was greatest when both the woman and her partner had the risk factor.

This KLOM study echoes the Abramsky et. al., study regarding protective and risk factors for IPV. Overall, the women in the KLOM study were older (above 29) than the men in the study and more likely to be disabled, ever married or having lived with a partner, to have married at younger ages, or to be in a polygamous marriage and less likely to have a higher (high school or above) education. While women married younger than the men, roughly equal percentages of men and women experienced the harmful traditional practice of child marriage before the age of 18. Likewise, there were no clear gender differences in males and females involvement in choosing their partner: more than a third of both men and women in WHP had someone else choose their partner. Large percentages of women in both WHP (47.5%) and WSP (23.8%) were in polygamous marriages which is associated with experience of IPV in PNG, particularly in the Highlands (Kopi M., et al., 2011) and echoes the multi-country study that found that women in polygamous marriages were at increased risk of IPV everywhere polygamy was practiced (Abramsky et al., 2011).

The issue of bride price remains a contentious one, especially in the Highlands. While the relationship of dowry and bride price to IPV has been found to be mixed globally (Abramsky et al., 2011), it remains a justification for wife beating in PNG whether because of non-payment of bride price, failure to return the bride price to the husband's family following a divorce (Kopi, M., 2011) or because men feel a sense of ownership over their wives after having paid bride price, especially when it comes to expectations for sex or refusal of sex (Bradley & Kesno, 2000; Eves 2011; Wardlow 2007; Eves 2007). While less than 10% of men and women in WSP agreed

that beating a woman was justified if she refused sex, slightly more than a quarter of men and more than half of women in WHP agreed.

Choice and bride price intersect where families arrange marriages and accept a bride price. The KLOM study found that the majority of men and women in WSP and WHP agreed that a woman must marry if her family had accepted a bride price. Further, more than half of the men and women in WHP, more than half of the women in WSP and nearly 40% of the men agree that having accepted a bride price is a justification for beating a woman. It is not clear in what circumstances this is a justification or if having paid a bride price confers ownership, so beating is justified whenever the husband decides.

Girls' education, particularly completion of secondary education and above is a protective factor for women across settings (Abramsky et al., 2011) and is more strongly associated with reduced risk of partner violence in countries where wife abuse is normative than where it is not (Heise L and Kotsadam A, 2015). This KLOM study found that women still lag behind men in terms of completion of high school or above, particularly in WHP where a larger proportion of women completed primary school education or less while a larger proportion of men completed high school education or above. This study also established the protective effect of girls' education finding that women with more education were less likely to report experiencing IPV. When looking at decision-making regarding children's education, the largest percentages of both men and women, particularly in WSP, report that these decisions are made jointly or by women alone, yet nearly a third of all women and of men in WHP say that men alone make the decision. Very small percentages (<7%) agree that sons should be given preference for an education. Yet these positive attitudes do not match the actual disparity in educational attainment reported above. Either changes in attitudes have not yet translated into improved educational attainment for girls or something else is going on. Roughly 50% of the sampled men in both WSP and WHP are not married and never lived with a partner, whereas that is true for only 25% of the women. It is possible that these questions about preference for boys' education over girls remains theoretical for unmarried men who may change their minds when faced with competing demands for boys' and girls' educational expenses. No matter the explanation, given the protective nature of girls' education, especially in societies such as PNG, where supportive norms for and experience of IPV are high, girls' education should be a focus.

Justifications for IPV: Gender norms regarding expectations for women and men undergird not only what is possible for women and men but also the use of violence to enforce those expectations or to punish women who violate those norms. The justifications for wife beating – neglecting children, going out without telling the husband, arguing with the husband, refusing sex or having been purchased through payment of a bride price – are all traditional norms regarding what is and is not expected from a "good" wife. Agreement with justifications for wife beating remains high, particularly in WHP where most women agreed with all five justifications for wife beating whereas the majority of men agreed with three—though more than 25% of men agreed with all five justifications. Agreement with justification for wife beating

was lower in WSP but the majority of women still agreed with three of the reasons for IPV, while men agreed with two. Those who were younger, less educated, female and from WHP were more likely to agree with the justifications and women who agree with attitudes supportive of men beating their wives are significantly more likely to experience IPV (Abramsky et al., 2011). Gender norms for masculinity, which emphasize fighting other men as well as actual involvement in fights with other men, are not only harmful to men but are also associated with higher levels of IPV (Abramsky et al., 2011; Kopi M, et al., 2011). Not surprisingly, a review of the evidence on effective prevention of violence against women and girls found the strongest programs not only challenge acceptability of violence but also address the underlying risk factors, such as harmful gender norms and women's economic dependence on men (Ellsberg M, et al., 2014).

Experience of IPV: Our findings confirm that incidence and prevalence of intimate partner emotional, sexual and physical violence is high and remains high in both Western Highlands and West Sepik Provinces. Incidence and prevalence are largely the same; the vast majority of those that have ever experienced GBV have also done so in the last year, suggesting that IPV, when it occurs, is not a singular event that happens in the distant past, rather it is perhaps on-going and current. Overall, emotional, physical and sexual violence are above 40% with emotional violence at roughly 60% followed by forced sex and then physical violence. Older women, those who completed secondary or college education, are not in a polygamous marriage, who make joint decisions regarding her employment and who use of a bank account were less likely to experience physical assault, all in keeping with global findings.

Women's report of experience of all forms of IPV roughly matches men's reporting of perpetration of all forms of IPV with the exception of forced sex and, to a lesser extent, physical assault during pregnancy. While over 50% of women report having been forced by their partners to have sex, less than roughly 25% of the men report having forced their partner to have sex. The women's report of forced sex does align with men's reported agreement with the statement that a woman has a duty to have sex with her husband. However, it does not match the much lower percentages of men agreeing that a man is justified in beating his wife if she refuses sex. It is possible that men and women were interpreting "force" differently and that "force" is perceived to be different than a "beating." This is an area for further inquiry.

Women who were younger and had a disability were at increased risk of experiencing sexual violence in marriage while those who had completed secondary or college education were at reduced risk of experiencing sexual violence. Women who reported sole or joint decision making with their husband regarding the women's employment were less likely to experience forced sex. However, women who decided jointly with their husband on health care seeking were 4.4 times more likely to experience forced sex compared to those who decided on their own. This becomes important for ensuring access to care in the aftermath of IPV.

Confusion over what is "forced sex", the role of violence and how this relates to rape is further highlighted in the responses to the question of whether anyone had ever in the women's

lifetime forced them to have sex or perform a sexual act. Although the question was broader than just rape and was asked of all female respondents (and not only of married women), the percent reporting sexual violence was small (WSP 14%, WHP 12.1%), certainly much smaller than the 50-56% of married women reporting forced sex in marriage. Either the definition of rape as being forced sex was not clear or it is believed that forced sex within marriage is not rape, particularly in WHP where most men and women believe that it is a woman's duty to have sex with her husband.

Violence during pregnancy is of particular concern because of the potential increased harm for both the women as well as their infants. IPV during pregnancy can serve as a barrier for women to timely and consistent antenatal care and increases the risk of miscarriage, fetal injury and death, premature labor and birth, as well as low birthweight (Head, Sara K., Sally Zweimueller, Claudia Marchena and Elliott Hoel. 2014). Moderate percentages (20-23%) of women reported that they had ever experienced physical assault during a pregnancy, while fewer men (14.5% WHP, 15.9% WSP) reported ever assaulting their partners during pregnancy. It is possible that assault during pregnancy and forced sex, the only other type of violence where the percentages of men reporting perpetration was much lower than women's report of experience, are types of violence that have shame or stigma associated with them for both the perpetrator and the survivor.

Disability and IPV: Nearly a third of all women reported having a disability while a tenth to a quarter of men did. Women who reported having any form of disability were more likely to agree that a woman should tolerate being beaten to keep her family together and more likely to experience sexual violence within marriage. This suggests that disabled women are more vulnerable and more tolerant of the behavior, perhaps because they have fewer options. This finding is in keeping with other studies globally and in PNG that find that women with disabilities experience multiple levels of vulnerability to IPV. They also experience barriers to help seeking or participation in IPV prevention or protective activities such as attending women's small groups or economic empowerment activities (Copel, L. C., 2006; Breiding, M. J., & Armour, B. S. 2015; Human Rights Watch, 2017). Given the multiple barriers women with disabilities face to IPV services and activities, the program will need to be particularly mindful in planning for participation and care of this population, especially since a high percentages of men (52-83%) reported that they alone make the decision on whether a woman can seek medical care.

All forms of Violence: Many studies have found a relationship between men's perpetration of IPV and their perpetration of violence against other men (Abramsky et al., 2011; Kopi M, et al., 2011) as well as either partner's witnessing their mother's abuse as a child or either partner experiencing physical or sexual abuse as a child. PNG has well documented high levels of virtually all forms of violence – IPV, violence against children, sorcery related violence and communal violence. This study asked about men's experience of physical assault but only as perpetrated by their female partners. Nearly a third of married men in WHP reported having

been physically assaulted by female partners compared to a tenth of men in WSP. These are not large percentages but, especially in WHP, it raises the issue of "mutually abusive relationships" as well as cultural acceptance of all forms of violence. One study examined this issue, asking both men and women the DHS questions on violence and concluded that overall there was "no evidence of symmetry in men's and women's experience of spousal violence (Kishor, S. and Bradley, SEK. 2012). Not only is the prevalence of spousal violence much higher among women than among men, but also its severity and intensity are much greater for women than men. Further, the violence is much more likely to be of a syndromic nature for women than for men. Finally, the analysis shows that, while men and women both perpetrate violence, among those who experience or perpetrate violence, most women are victims only and the majority of men are perpetrators only." The study went on the report that the small percentages of women who perpetrate violence have also experienced violence. This does not mean to belittle men's experience of IPV, but women's experience is more pervasive, frequent, severe and uni-directional. It will be important going forward for the project to acknowledge and address all forms of IPV and their common root cause of harmful gender norms, but also to be mindful of the disparities which exist in perpetration and experience of IPV.

Help Seeking Knowledge and Behavior: The KLOM project promotes health services as the entry point for rape survivors. Project communication emphasizes the importance and the benefits of seeking health care within 72 hours so that providers can administer post-exposure prophylaxis, provide emergency contraception, HBV and tetanus vaccine, provide HIV testing and counseling and diagnose for potential STIs. While the majority of women and men in WHP and men in WSP reported medical services as the first place to seek help for rape followed by the police, women in WSP would turn first to the police. The much lower percentages of women and men in WSP reporting that women who have been raped should turn to medical care first suggests either a need for a programmatic adjustment to increase awareness around the need for medical services within 72 hours or that police or medical services are requiring rape survivors to report to police first to obtain the necessary form for reporting rape. This has been an issue in the past and would require renewed outreach and education for service providers.

Nearly 90% of women in both provinces who had ever experienced physical assault had gone to the police to seek help but roughly half had done so within the last 12 months. More women in WHP (66.0%) compared to WSP (45.1%) had ever accessed medical care following physical violence and those numbers dropped for those seeking care in the last 12 months, precipitously so for women in WSP. Overall, these percentages of survivors seeking medical and police services after IPV are a testament to the success of the project given the larger cultural barriers to seeking care both within the home, the community and within the women themselves. Globally, the proportion of female survivors who seek help ranges from 18% in Azerbaijan and the Philippines to 52% in Colombia but within South/Southeast Asia, the average is 24% (Head, et. al.,2014).

The number of women who identified as rape survivors was too small to assess. The fact that the numbers were so low, given that more than 50% of married women reported ever experiencing forced sex as well as within the last 12 months highlights a key issue for the project going forward. Are women who experience rape in marriage accessing any services? If not, why not? Is it because they do not see any value to accessing medical care? Given the established relationship between IPV, HIV, STIs and unintended pregnancies, is this an opportunity to highlight education for married women? Are married women in sexually abusive relationship using contraception covertly? Is this an opportunity to target them for long-acting reversible methods? One form of IPV not intentionally measured as such in this study is reproductive coercion: when women are forced to have sex or to have unprotected sex by their male partners or their partners intentionally sabotage the women's use of family planning with the intent to either increase their female partner's dependency or to take control over their partner's decision making (Miller E, et al., 2010; Miller E, et al. 2014). In these circumstances, women may choose to use a method which they can hide and/or does not require negotiation.

Barriers to Help Seeking: While the study did not ask specifically about barriers to help seeking behavior, several of the questions on gender norms and justifications for IPV point to barriers, including the relative roles of men and women in decision making regarding women's own health care, whether it is justified to beat a woman for going out without telling her partner and whether a woman needs her partner's permission before seeking medical assistance. When it comes to decision-making about a woman's own health, men are more apt to report that they alone make the decision over their partner's health, while women report that they are more apt to make decisions about their health care on their own. Should women decide to seek healthcare for IPV, they run up against a norm where large majorities of both men and women report that women must secure their male partner's permission before seeking medical care. If they defy this norm and go out without telling their partner, the majority of men and women report that this is a justification for wife beating. Given the disconnect between women's report of sexual violence and of physical assault while pregnant and men's report of perpetrating these forms of IPV, it is possible that men would want to hide their behavior by inhibiting women's access to external support services. This is especially true when projects, such as KLOM, have been working to raise awareness of the laws regarding IPV and, as a result, men become aware that there could be legal consequences should their partners seek help. One mitigating bright bit of data is that more than 60% of women report that they have their own money which removes a common barrier to help seeking.

Role of Men in Abating Violence against Women and Children: When women do face IPV or barriers to accessing care after IPV is perpetrated by their own husbands, ironically, they may be able to gain support by turning to neighbor's husbands or other men in their community. While men in the study reported that they perpetrate IPV against their own wives and partners, they are also surprisingly willing to help other men's wives and children in their communities. Nearly half of all men in the study said that women and children who had been beaten had come to them for help in the past; over three quarters reported that they had intervened to

stop men from beating their wives and children. And men overwhelmingly reported that they would be willing to intervene in the future if they see a neighbor's wife or child being beaten. This is incredibly positive and affords an entry point for not only engaging men as "champions" for other's wives and children but could also be a strategy for talking to them about the violence their own wives and children face in their home.

9.3 | Conclusions and Recommendations

All forms of IPV remain high in the KLOM program areas with psychological violence being the most common. Large percentages of women reported being forced to have sex within marriage and a small but important percent of women reported being physically assaulted during pregnancy. Key decision making between men and women varied, with more men reporting joint decision making. Agreement with harmful gender norms primarily dropped, but agreement with five justifications for wife beating remained high, especially among women. Bride price remained a barrier to women's empowerment and constituted an important justification for IPV. Women's higher education and economic empowerment factors were protective for women against IPV, while polygamy, bride price, lower education, younger age, disability and agreement with justification for wife beating were risk factors for IPV. Women's economic activities such as controlling a joint or sole bank account and having her own money were important contributors to women's empowerment. The majority of men and women knew where to seek help and comparatively large percentages of female physical violence survivors reported having sought help. The overwhelming majority of men reported having helped women and child violence survivors in the past and were willing to do so in the future.

Based on these study results, to address GBV and IPV in the KLOM project and more generally in PNG, it is recommended to:

- Increase women's access to economic empowerment small group activities and opportunities for family based financial literacy and business.
- Create a project strategy for engaging disabled women in program activities and to assist them in accessing services.
- Create a focus on forced sex within marriage including SBCC for reaching women and men on prevention of forced sex in marriage as well as the benefits of seeking services in the aftermath, including access to contraception.
- Given the protective nature of girls' education, work on improved access to secondary education for girls and boys while scaling up the Safe Schools initiative to transform gender norms and attitudes by addressing issues of relationships, gender roles, power and coercion.
- Reassess program interventions in WSP versus WHP given cultural differences, including risk factors of polygamy and more entrenched norms supporting IPV.
- Continue to conduct outreach interventions to educate community members on the rights of women and girls in decision making about issues affecting themselves and their family members.

- Work with service providers to strengthen linkage and referral systems for survivors.
- Continue to promote awareness of the availability of services and where the survivors should go first to access services, emphasizing the importance and benefits of seeking medical care within 72 hours of rape
- Given the prevalence of emotional violence, reassess program materials and training programs to better integrate addressing this type of IPV.

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