

ANNEX I: ADDITIONAL INFORMATION ON METHODOLOGY

The main components of the methodology are covered in the main report, including the study design, sampling, questionnaire development and content, survey implementation and ethical considerations. This Annex I provides additional details on the research methodology, specifically:

- strategies for maximizing disclosure
- interviewer training
- quality control
- sample design and sample size calculations
- data analysis
- operational definitions of explanatory variables
- qualitative study design
- comparing prevalence of weighted and unweighted samples

MAXIMIZING DISCLOSURE

Given the sensitive nature of the study, which included questions about men's own perpetration of violence, careful steps were taken throughout the process to ensure maximum disclosure from all respondents.

QUESTIONNAIRE STRUCTURE AND WORDING

Based on the experience of the World Health Organization with its Multi-country Study of Women's Health and Domestic Violence against Women, the questionnaires asked less-sensitive information early on and then sensitive questions later in the survey, once trust and rapport had been built between the interviewer and respondent. The women's questionnaire was designed to both begin and end with less-sensitive questions, with the most sensitive questions on experiences of violence only asked in the middle of the interview, to have enough time to build up rapport between the respondent and interviewer so that disclosure was increased and avoided respondents undergoing psychological distress after participating in the survey. Information regarding service providers was given to all respondents in case they wanted to seek support services after the interview.

Violence against women often carries stigma, both for the perpetrator and for the woman who has experienced the violence. Based on international standards, careful effort was made to ensure that all questions were phrased in a non-judgemental manner and that the words 'violence' and 'rape' were never used in either questionnaire. Questions on violence instead described the specific acts, using objective terminology (see table 2.2 on items used to measure intimate partner violence, in chapter 2 of the report, for examples).

In both questionnaires, short introductory statements were provided at the start of each section and especially before the most sensitive questions. These statements reminded respondents of both the confidentiality of their responses and of the value of their information to help improve the lives of men and women in their country. Many of these statements also reminded respondents of their right to stop the interview, take a break or skip a question at any time.

QUESTIONNAIRE ADMINISTRATION

The final section of the man's questionnaire, dealing primarily with men's use of sexual violence, was self-administered by men using small, handheld computers (PDAs). This meant that their responses were completely anonymous. Even the interviewers had no way of knowing men's responses in section 8 of the questionnaire. In this section, the PDAs were complemented by an audio track to ensure that all men were able to complete the section, regardless of their literacy level. Other studies have found that women benefit from face-to-face interviews with non-judgemental and supportive interviewers and so self-administration was not used in the female survey (Jansen et al., 2004; Ellsberg and Heise, 2005).¹

To ensure confidentiality, all interviews were conducted in a private space of the respondents' choosing, where others were not able to overhear their responses. For ethical and safety reasons, only one person was interviewed per household, and men and women were interviewed in different clusters.

INTERVIEWERS

For ethical reasons and to make respondents feel most comfortable, male interviewers interviewed men and female interviewers interviewed women. As far as possible, interviewers were also selected from the same ethnic or cultural background as respondents, although not from the same village or community.

TRAINING OF INTERVIEWERS AND SUPERVISORS

The selection and training of appropriate supervisors and interviewers was an essential component of ensuring the success of the study. The interviewers were selected on the basis of their ability to interact with all classes of people, be non-judgemental, their maturity, skill at building rapport and experience in dealing with sensitive issues.

Given the complexity of the questionnaire and the sensitivity of the research topic and based on the World Health Organization ethical guidelines for research on violence against women, all fieldworkers were required to attend two to three weeks of training, including a pilot test. To maintain consistency in methodology and to ensure the same ethical standards across the study sites, the training was standardized in all countries, following the UN Multi-Country Study on Men and Violence Interviewer Training Manual and Supervisor Training Manual, designed by P4P. In each country, training was conducted jointly by the research institute implementing the study and P4P, often with contribution from local NGOs.

Training focused on: sensitization around gender issues, violence and masculinities, interview techniques, practice using the questionnaire, PDA-use, ethical and safety issues and field procedures. Supervisors received additional training on sampling techniques (including the selection and enumeration of clusters, the selection of households and respondents), safety of respondents and interviewers, reducing non-response, quality-control procedures and fieldwork monitoring.

A pilot study lasting usually two days was conducted towards the end of the training in sites that were demographically and culturally similar to the main study sites. The pilot was an opportunity for both interviewers and supervisors to put into practice all that they had learned during the training and field-test the PDAs. A thorough debrief session directly followed the pilot in each country to illuminate and resolve any outstanding problems before data collection began. In cases in which certain field procedures or concepts remained problematic after the pilot, additional training was conducted.

QUALITY CONTROL

A range of mechanisms were used to monitor the quality of the survey implementation. Details of eligible members of each household were compiled during the survey. Possible sampling biases were explored by comparing the sample interviewed with the distribution of eligible respondents.

¹ The only exception to this was in China, where, for respondents' safety and anonymity, both the men's and women's questionnaires were entirely self-administered.

To monitor the quality of the interviewers' work, supervisors conducted random re-checks of some households during fieldwork, without warning interviewers ahead of time. The supervisors did quality-control interviews with a sub-sample of respondents to check consent procedures, confidentiality, the responses to a few questions and assess the respondent's perceptions about the interview. Supervisors also used field-monitoring sheets and reviewed the interviewers' paperwork each evening to track the progress of their team and of each individual interviewer. Supervisors also conducted daily debriefs with their team throughout the data collection. These mechanisms enabled the supervisors to determine and address problems directly while in the field, mitigating any potential loss of quality to the data.

Skips and valid limits were automatically programmed into the PDAs, which helped ensure that the quality of the data entry was not jeopardized by human error.

At the start of all interviews, participants were informed of the purpose and nature of the study through an information sheet.² Respondents were asked to sign consent forms or, if they felt more comfortable, give verbal consent to participate in the survey (in which case the interviewer signed the consent form on behalf of the respondent), acknowledging their agreement to participate. Signed consent forms were always kept separate from household lists, and upon the interviewers' returning from the field, kept in a locked filing cabinet. The respondents were free to terminate the interview at any point and to skip any questions that they did not want to answer.

SAMPLE DESIGN AND SAMPLE SIZE CALCULATIONS

A minimum sample size of 1,000 men aged 18–49 years per country was established, based on calculations using the following formula:

FORMULA FOR DIFFERENCE IN PROPORTIONS

$$n = \left(\frac{r+1}{r} \right) \frac{(\bar{p})(1-\bar{p})(Z_{\beta} + Z_{\alpha/2})^2}{(p_1 - p_2)^2}$$

Sample size in the case group (points to n)
 r=ratio of controls to cases (points to r)
 Represents the desired power (typically 0.84 for 80% power) (points to Z_{β})
 Represents the desired level of statistical significance (typically 1.96) (points to $Z_{\alpha/2}$)
 A measure of variability (similar to standard deviation) (points to $(\bar{p})(1-\bar{p})$)
 Effect size (the difference in proportions) (points to $(p_1 - p_2)^2$)

Power=70%

Alpha=1.96

Minimum odds ratio to be detected=1.5

Prevalence of the exposure in the control (non-intimate partner violence) group for childhood physical abuse=-0.3

Divide all by 0.82 for the proportion of ever-partnered men

Assume an overall prevalence of intimate partner violence of 0.45 among ever-partnered men (case to control ratio is 1.22)

This will calculate a sample size of 908.

Annex table 1 contains the details of the sample design by site.

² In Bangladesh, respondents did not receive a separate information sheet because this information was incorporated into the consent form.

TABLE A1 **SAMPLE DESIGN, BY SITE**

COUNTRY/ SITES	ETHICS APPROVAL	SAMPLE DESIGN	NO. OF STRATA	NO. OF CLUSTERS
BANGLADESH-RURAL (MATLAB)	icddr,b Ethics Review Committee	The villages were stratified into large, medium and small categories. Villages were selected using the probability proportional to size sampling method (PPS), and within each village, 30 households were sampled randomly from household lists obtained from the icddr,b Demographic and Health Surveillance database.	1	65 villages
BANGLADESH-URBAN (DHAKA)	icddr,b Ethics Review Committee	Mohallas were stratified by size and selected using PPS, drawn from the Bangladesh Bureau of Statistics, 2011. Then, using simple random sampling, one enumeration area (consisting of about 120 households on average) was selected from each mohalla. Households were systematically sampled from each enumeration area.	1	50 mohallas
CAMBODIA-NATIONAL	National Ethics Committee for Health Research, Ministry of Health	Random sampling of villages (census areas) in each province using PPS, systematic sampling of households within villages.	2 of 4 subregions were randomly selected, then 2 provinces per region selected using PPS (Kampot, Sihanoukville, Siem Reap, Battambang), plus Phnom Penh.	113 villages
CHINA-URBAN/RURAL	College of Humanities, Beijing Forestry University	Sampling units were village committees or neighbourhood committees; within the selected ones, eligible individuals were systematically sampled from the population register.	2	75 village committees or neighbourhood committees, but sample implementation resulted in selection of 67 communities using PPS because 8 were selected twice.

TABLE A1 **SAMPLE DESIGN, BY SITE**

COUNTRY/ SITES	ETHICS APPROVAL	SAMPLE DESIGN	NO. OF STRATA	NO. OF CLUSTERS
INDONESIA-RURAL (PURWOREJO)	Medical and Health Research Ethics Committee, Ministry of National Education	Clusters were census units selected using PPS. Households were systematically selected from household lists.	1	40 clusters per site
INDONESIA-URBAN (JAKARTA)	As above	As above	1	40 clusters per site
INDONESIA-PAPUA	As above	As above	1	40 clusters per site
PNG- BOUGAINVILLE	South African Medical Research Council Ethics Committee	Clusters were census units; within them, households were systematically selected from household lists.	3 regions (North, Central and South) and 3 categories of village size	150
SRI LANKA- NATIONAL	Sri Lanka Medical Association	Within each district, a random sample of electoral areas, and within each, 8 Grama Niladari divisions (polling booths) were selected using PPS.	4 districts (Colombo, Nuwara Eliya, Hambantota and Batticaloa) purposively selected; the sample was stratified by (randomly selected) electorates and within each district, with 5 strata in Colombo, 4 in Nuwara Eliya, 4 in Habantota and 3 in Batticaloa.	81 clusters

DATA ANALYSIS

All procedures took into account the multi-stage structure of the data set, with stratification by site within a country and the enumeration areas as clusters, by using Stata's survey functionality, which fits statistical models for complex survey data. Missing data on the GEM Scale and partner numbers were replaced using standard techniques for multiple imputation. No other replacement was done.

For each country, multivariate logistic regression models were built to determine the factors associated with the perpetration of physical and/or sexual intimate partner violence and non-partner rape, adjusted for age, education, partnership status and site. The same models were built for the pooled regional data set, adjusted for age and site. Backwards elimination was used initially for variables of $p=0.2$ or greater, and the final model variables were retained at $p \leq 0.05$.

Following Rockhill, Newman and Weinberg (1998), the population attributable fractions for different types of partner violence perpetration were calculated using the incidence rates from the adjusted model and the formula: $PAF = ((RRR-1)/RRR) \times Pe$, where Pe was the proportion of the cases that had the exposure. Confidence intervals were calculated using the same formula but with the upper and lower limits of the relative risk ratio (RRR).

TABLE A2

OPERATIONS DEFINITIONS OF POSSIBLE EXPLANATORY VARIABLES FOR VIOLENCE PERPETRATION

RISK FACTOR VARIABLES	DEFINITION
SOCIAL CHARACTERISTICS	
No high school education	Primary level education or no education.
Current food insecurity	Sometimes or often people at home go without food due to lack of money.
VICTIMIZATION HISTORY AND CHILDHOOD	
Maternal absence	When growing up, biological mother rarely or never at home.
Paternal absence	When growing up, biological father rarely or never at home.
Childhood emotional abuse or neglect	Men were asked about their experiences of trauma in childhood using a modified version of the Childhood Trauma Events Scale (Jewkes, Nduna, Jama-Shai and Dunkle, 2012; Bernstein et al., 1994). Before 18 years of age, respondent had at least one of the following experiences sometimes, often or very often: lived in different households at different times; was told he was lazy or stupid or weak by someone in his family; was insulted or humiliated by someone in his family in front of other people; both of his parents were too drunk or drugged to take care of him; spent time outside the home and none of the adults at home knew where he was.
Childhood physical abuse	Before 18 years of age, respondent had at least one of the following experiences sometimes, often or very often: was beaten at home with a belt, stick, whip or something else that was hard; was beaten so hard at home that it left a mark or bruise.

Childhood sexual abuse	Before 18 years of age, respondent had at least one of the following experiences sometimes, often or very often: someone touched his buttocks or genitals or made him touch them when he did not want to; had sex with someone because he was threatened or frightened or forced.
Witnessed abuse of mother	Before 18 years of age, respondent saw or heard his mother being beaten by her husband or boyfriend.
Sexual victimization (including rape)	Respondent had been persuaded or forced to have sex or do something sexual by a man when he didn't want to.
Experienced homophobic violence or teasing	Respondent was called names, endured derogatory remarks or was subjected to violence or threats because he was perceived as effeminate or attracted to men.

GENDER ATTITUDES AND RELATIONSHIP PRACTICES

Inequitable gender attitudes	Tertiles created from 10 items, scored on a 4-point scale, from strongly agree to strongly disagree: A woman's most important role is to take care of her home and cook for her family; there are times when a woman deserves to be beaten; it is a woman's responsibility to avoid getting pregnant; a woman should tolerate violence in order to keep her family together; to be a man, you need to be tough; a woman should obey her husband; a man should have the final say in all family matters; a woman cannot refuse to have sex with her husband; when a woman is raped, she is usually to blame for putting herself in that situation; if a woman doesn't physically fight back, it's not rape (Pulerwitz and Barker, 2008). Alpha = 0.72
Partner more educated than him	Respondent's current or most recent female intimate partner is more educated than he is.
Partner earns more than him	Respondent's current or most recent female intimate partner earns more income than he does.
Frequent quarrelling with partner	Respondent quarrels with current or most recent intimate partner sometimes or often (compared with rarely).
Controlling behaviour	Partner is moderately or highly controlling over female partner, compared with least controlling, based on 8 items scored on a 4-point scale, from strongly agree to strongly disagree: When I want sex I expect my partner to agree; if my partner asked me to use a condom, I would get angry; I won't let my partner wear certain things; I have more to say than she does about important decisions that affect us; I tell my partner who she can spend time with; when my partner wears things to make her look beautiful I think she may be trying to attract other men; I want to know where my partner is all of the time; I like to let her know she isn't the only partner I could have (Jewkes, Nduna and Levin, 2008; Pulerwitz, Gortmaker and Dejong, 2000).

Transactional sex	Respondent has ever had sex with a male, female or transgender sex worker or ever had sex with a woman or girl in exchange for: drugs, food, cosmetics, clothes, a cell phone, transportation; somewhere to stay; something for her children or family; or money to pay her bills or school fees (Jewkes, Dunkle, Nduna and Jama-Shai, 2012).
Number of lifetime sexual partners	Number of different people respondent has had sex with in his whole life: 1 (ref); 2-3; 4+

PSYCHOLOGICAL FACTORS AND SUBSTANCE ABUSE

Depression	Respondent has high depressive symptomatology (measured using the CES Depression Scale in all sites except Sri Lanka, where abbreviated scale was used).
Empathy	A measure of empathy based on 4 items scored on a 5-point scale, from 'doesn't describe me at all' to 'describes me very well': I often have tender, concerned feelings for people less fortunate than me; when I see someone being taken advantage of, I feel protective towards them; I am often touched by things that I see happen; I would describe myself as a pretty soft-hearted person. Alpha = 0.793.
Life satisfaction	Measure of satisfaction with current life circumstances, based on 4 items scored on a 4-point scale, from strongly agree to strongly disagree: In most ways, my life is close to my ideal; the conditions in my life are excellent; I am satisfied with my life; so far I have gotten the important things I want in life (Diener et al., 1985). Alpha = 0.787.
Alcohol abuse	Based on the AUDIT scale: frequency of drinking, number of drinks usually consumed, frequency of binge drinking (6+ drinks) and feelings of guilt or remorse after drinking and failure to do what was normally expected of respondent because of drinking (Saunders et al., 1993).

INVOLVEMENT IN VIOLENCE OUTSIDE THE HOME AND DRUG USE

Participated in a gang	Respondent ever participated in a gang.
Involved in fights with weapons	Respondent ever involved in a fight with a knife, gun or other weapon.
Past-year drug use	Respondent ever used drugs in the previous 12 months.

COMPARISON OF WEIGHTED AND UNWEIGHTED PREVALENCE RATES

The standard prevalence rates of all types of violence were compared with prevalence weighted for the number of eligible men in a household in all countries except China (where sampling was of individuals), as shown in table A3 of this Annex. No significant difference was found; thus the analysis presented in the report is not weighted.

TABLE A3

COMPARISON OF PREVALENCE RATES FOR MAIN VIOLENCE PERPETRATION OUTCOME VARIABLES WEIGHTED BY NUMBER OF ELIGIBLE MEN IN THE HOUSEHOLD WITH NON-WEIGHTED PREVALENCE RATES, FOR TOTAL COMBINED SAMPLE

NOTE

This does not include China, where sampling was of individuals not households.

	WEIGHTED			NOT WEIGHTED		
	PROPORTION (%)	LOWER CI (%)	UPPER CI (%)	PROPORTION (%)	LOWER CI (%)	UPPER CI (%)
NON-PARTNER RAPE PERPETRATION						
NO RAPE	85.4	83.5	87.1	86.3	85.0	87.5
SINGLE PERPETRATOR RAPE	9.1	8.0	10.5	8.8	7.9	9.8
MULTIPLE PERPETRATOR RAPE	5.5	4.6	6.5	4.9	4.3	5.5
INTIMATE PARTNER VIOLENCE						
NO INTIMATE PARTNER VIOLENCE	41.4	38.4	44.5	43.5	41.7	45.3
PHYSICAL INTIMATE PARTNER VIOLENCE ONLY	12.5	11.1	14.1	13.1	12.0	14.3
SEXUAL INTIMATE ONLY	16.3	14.7	18.0	16.1	15.2	17.2
BOTH PHYSICAL AND SEXUAL INTIMATE PARTNER VIOLENCE	13.5	11.8	15.4	12.5	11.3	13.8
FREQUENT EMOTIONAL ABUSE	16.4	14.1	19.0	14.8	13.7	16.0
RAPE PERPETRATION OF A MAN						
NEVER RAPED A MAN	97.0	96.3	97.5	97.0	96.4	97.4
RAPED A MAN	3.0	2.5	3.7	3.1	2.6	3.6

QUALITATIVE STUDY DESIGN

The qualitative component of the research was conducted in Bangladesh, Bougainville (PNG), China, Indonesia (Aceh) and Viet Nam and took an in-depth look at individual men’s life histories to understand how these may have impacted on their practices today. The objective was to understand how men’s practices related to masculinities and violence/non-violence are formed throughout their lives. To do this, the research contrasted the practices and lives of two groups of men: those who were identified as using violence against women and those who did not use violence and displayed behaviours with more ‘gender-equitable’ attributes. The regional findings are expected to be released in late 2013.

The qualitative questionnaire explored the following primary research questions:

- What influences across the life course operate to shape gender equitable forms of behaviour in men? At what stages across the life course are these expressed and in what ways? What are the relationships between ‘non-traditional’ practices, the use of violence and attitudes towards and practices of gender equity in other areas of these men’s lives?

- What influences across the life course operate to shape the violent behaviour of men? At what stages in the life course are different types of violence expressed by men who are violent towards women and in what ways? What are the relationships between use of violence and attitudes towards and practices of gender equity in other areas of these men's lives?
- Are there particular differences in the life histories, trajectories and influences of these two groups of men and what does this tell us about how to encourage men to be more gender equitable and non-violent?

The study population was men aged between 18 and 49 years, inclusive. The study was conducted in the following countries:

- Indonesia (Aceh)
- Bangladesh
- China
- Bougainville, Papua New Guinea
- Viet Nam

The qualitative research used purposive sampling. At a minimum, each country involved two-part truncated life history interviews with 20 men:

- 10 men who were known to have perpetrated physical or sexual violence against a female partner on more than one occasion
- 10 men who were known to be gender equitable or display non-dominant/traditional notions of masculinity—this could mean that they were involved in gender-related activist work (paid or unpaid) or non-hegemonic practices.³

The gender-equitable men were purposively sampled to meet the general criteria for the study through social networks, NGO networks and organizations working on men and gender issues in the selected study sites. The men who are violent were identified through processes of social networking with men who are known in the area to have something that identifies them as hegemonically masculine (having authority in the society, such as police) or displaying protest masculinity, which arises among people who do not have much authority and have to use the hyper masculine displays to claim social status (such as militants, gangs and men who drink heavily in bars). This sampling strategy of selecting persons through existing networks and personal relations may have led to some bias, although the samples were not designed to be representative.

³ This was a sampling strategy and not meant to suggest a dichotomous relationship between violent and non-violent men. In reality, not all men who are gender activists will be gender equitable in all areas of their lives, as discussed in the analysis of the national reports (see www.partners4prevention.org).