

# Community Action on Harm Reduction Endline Evaluation Report

---

Indonesia

Arie Rahadi\*

Andika Wirawan

Arry Lesmana Putra

Ardhany Suryadharna

Anton Mulyana Djajaprawira

July 2014

\* Team leader. Correspondence to Arie Rahadi at [arie.rahadi@gmail.com](mailto:arie.rahadi@gmail.com)

## Table of Contents

Acknowledgement .....	3
Conflict of Interest .....	4
Abbreviations.....	5
Executive Summary.....	6
Background .....	8
Evaluation objectives .....	8
Methods.....	9
Eligibility criteria.....	10
Sample size, sampling frame and recruitment .....	10
Study questionnaire and interview conduct.....	11
Data analysis .....	11
Data collection, preparation and management.....	13
Ethics statement .....	13
Results.....	14
Evaluation of target achievement.....	14
Descriptive results of endline survey .....	14
Comparison with baseline.....	14
Comparison by access intensity .....	21
Discussion.....	25
Summary of findings .....	25
Sample and risk characteristics.....	25
Programme effectiveness .....	26
Satisfaction and quality of life (wellbeing).....	28
Condom use in spousal sex: pleasure and procreation .....	28
Hard-to-reach clients .....	29
Programme engagement and increased risks.....	29
Limitations .....	31
Conclusion.....	32
Recommendations .....	33
References .....	35
Supplements. Tables and figures.....	37
1.Socio-demographic characteristics .....	37
2. Injecting behaviours.....	48

3. Police and law .....	83
4. Sexual behaviours .....	87
5. Knowledge of HIV and injecting risks.....	98
6. HIV testing.....	100
7. Services provided & satisfaction.....	112

## Acknowledgement

We thank all the participants in Bandung, Bogor, and Sukabumi for their valuable time and responses in this study. Their contribution was well acknowledged and compensated fairly. We also express our gratitude to enumerators who were peer educators and outreach workers at Rumah Cemara (Bandung and Sukabumi) and Rumah Singgah PEKA (Bogor) without whose contributions this study would not have been possible. This study was implemented as a part of the Community Action on Harm Reduction Project, funded by the Ministry of Foreign Affairs of the Government of the Netherlands (BUZA).

## Conflict of Interest

At the time of this study Arry Lesmana Putra was affiliated with the West Java Provincial AIDS Commission and HIV Cooperation Programme for Indonesia which also partially funded harm reduction activities to Rumah Cemara (Bandung and Sukabumi) and Rumah Singgah PEKA (Bogor) through grants from the Australia's Department of Foreign Affairs and Trade (formerly AusAID). We pledge no other potential conflict of interest.

## Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
BUZA	Ministry of Foreign Affairs of the Government of the Netherlands
CAHR	Community Action on Harm Reduction
CI	95% Confidence Interval
diff.	Difference in probability or effect size
HIV	Human Immunodeficiency Virus
IQR	Inter-Quartile Range
NSP	Needle and Syringe Programme
OST	Oral Substitution Treatment
PWID	People Who Inject Drugs
SD	Standard Deviation
TIMELY	Train, Intensify, Monitor, Low-cost and comply

## Executive Summary

This report was commissioned by Rumah Cemara under support of the International HIV/AIDS Alliance to document the endline evaluation results of CAHR implementation in 3 cities of West Java, Indonesia and provide directives to resolve gaps in outcomes and programmatic responses. The present report is the first of the two in series with a substantial focus on the descriptive results in comparison to the 2011 baseline situation. We surveyed 216 randomly selected clients (18 female) in Bandung, Bogor, and Sukabumi based on the pre-determined sampling strategies. Baseline data were extracted from a published report and reconstructed to fit the statistical properties necessary for our comparative analyses. We presented our comparative analyses relative to baseline and by length of programme engagement (new and existing clients). The evaluation protocol was approved for ethics clearance by an authoritative research institution.

The present programme cohort had distinct characteristics particularly in older age, more migrants, and better employment prospect relative to the baseline cohort. Most were exposed to the programme for not more than 2 years. Needle reuse and sharing more than doubled to 24% from 11% in 2011 (CI in difference: 6—20%;  $p < 0.001$ ) and consistent condom use in spousal sex fell by half to 18% from 35% (CI diff.: 6—28%,  $p < 0.01$ ). All the other risk indicators were generally similar, save a few demonstrating a significant decline. The present cohort was more satisfied with programme performance and had a higher wellbeing index (0.77 out of 1 from 0.70 in 2011). Riskier clients received care for a longer time and actively sought it. Cohort effect and drug market dynamics are suspects for the increased trend in risk behaviours since baseline. Failure to engage early in care permitted risk accumulation that after a certain period post-enrolment triggered care seeking. Limiting to needle sharing and condom use, we did find strong indication that implementation might have differed in quality by city/implementing organization.

Our recommendations centred around developing a robust capacity for timely provision of harm reduction services utilizing the standard, proven methods including relentless education campaign, intensive outreach, and integrated referrals. It is also important that Rumah Cemara ensures a systematized monitoring system, funding security, and integrates harm reduction into mainstream services that are now priority areas in HIV. This report also underlined the importance of a gendered approach to safer sex with stable partners. We recommend steps to improvements in the **T**(rain staff and clients), **I**(ntensify harm reduction work using proven methods), **M**(onitor systematically the risk patterns for informed decision), **E**(xpand care more widely to those in need) with **L**(ow-cost, non-inferior, integrated services), and comply (with the standard conduct of care that we know works), or **TIMELY**, manner.

In conclusion, a timely approach to care provision is needed to minimize missed opportunities in prevention. A shrinking yet higher-risk cohort captured in our survey challenges the general wisdom of displacing priorities disproportionately outside harm reduction following the national shift in health burden to sexually acquired infections.

## Background

The HIV epidemic in Indonesia has been driven by injecting drug use, with prevalence in people who inject drugs (PWID) reaching 48% nationally or 60% in the West Java province. Basic harm reduction services have been widespread and available in public health facilities in priority provinces and municipalities with a significant estimate of PWID size following the rapid scale-up in the 2005—2010 period. As of 2012 a total of 194 and 74 service points providing needle and syringe programming (NSP) and oral substitution treatment (OST) have been established to cater to an estimated 130,000 PWID across the nation in the penitentiary and community settings (Stoicescu, Cullen, Toska et al., 2012). During the same period, uptake of antiretroviral therapy (ART) almost trebled with a substantial use attributed to PWID and/or their partners for treatment and prevention of parental transmission (National AIDS Commission, 2012). The altered dominant mode of transmission to sexual acquisition in recent years (Des Jarlais, Feelemyer, Modi et al., 2012; Ministry of Health, 2013), coupled with a shrinking pool of available funds following the nation's ascension into the middle-income country grouping (International HIV/AIDS Alliance, 2012), underlies the threat of potential disinvestment from harm reduction where continual and expanded programmes are much needed to retain and enrol PWID in areas with limited services.

The Community Action on Harm Reduction (CAHR) is a complex, multifaceted intervention initiated by the International HIV/AIDS Alliance aimed at expanding access to harm reduction by both direct service provision and the conditioning of determinants to access to care as pertaining to social support, human rights, and the enabling legal framework. Beginning implementation in 2011, CAHR has been launched internationally in China, India, Indonesia, Kenya, and Malaysia with various types of local managing partners and with the contextualized implementation structure, programme configuration, and service models. In Indonesia CAHR is managed by community-based organization Rumah Cemara with operations in four provinces and 10 key programme areas ranging from harm reduction provision, capacity building for prison-based harm reduction to specific targeting (e.g. female and youth populations) (International HIV/AIDS Alliance, 2013; *Rumah Cemara CAHR Implementation Strategy*, 2013). In essence, CAHR integrates well into national harm reduction planning and has brought support for sustained programme engagement in harm reduction.

### Evaluation objectives

This present report, commissioned by Rumah Cemara under support of the International AIDS Alliance and Rumah Cemara, is the first of the two-part series to document the results of the end-of-project evaluation of CAHR conducted by the consultants in partnership with Rumah Cemara from March to completion in July 2014. The present evaluation limits to community-based harm reduction programming in three selected cities of West Java, which are Kota Bandung, Kota Bogor, and Kota



Sukabumi. Baseline assessment was conducted in 2011 in these cities (Rumah Cemara, 2011); and in this final evaluation we sought to:

1. document PWID client responses elicited in a standardized questionnaire on safe injecting practice, treatment of law enforcement, sexual behaviour, knowledge of HIV and safe injecting, HIV testing, service satisfaction, and quality of life;
2. examine changes in key programme indicators in the aforementioned areas from the baseline situation;
3. test for differences in programme indicators by length of participation in the programme (*i.e.* client type);
4. measure the association between length of participation and injecting and sexual behaviours;
5. measure the association between length of participation and quality of life scores;
6. test the validity and reliability of the quality of life questionnaire in a principal component analysis

Where aims 1 to 3 make up the primary analysis presented in this report and aims 4 to 5 and aim 6 are respectively the secondary and tertiary analyses described in the latter report. Additionally, in this report we also evaluated the programme target achievement based on the sampling frame constructed for this evaluation.

## Methods

Our approach to evaluation was driven by the desire to enrich the analysis given the constraints in design and data collection so as to strategically inform programme managers of future programmatic and organizational improvements. In this final evaluation, programme exposure by participation time was explicitly hypothesized in relation to programme indicators, HIV risks, and quality of life. We posit that services offered under CAHR add value to the health and wellbeing of PWID clients who may have concurrent enrolments at multiple providers for similar, related, or distinct harm reduction services; and that this complementary effect will grow the longer clients participate in the CAHR programme. For many health promotion programmes and harm reduction in particular, wherein exposure to an intervention must be highly consistent for successful elimination of the unwanted risk, length of participation therefore serves as a proxy for intensity of exposure.

Incorporating this idea of time-accumulating exposure, in this evaluation clients were categorized as ‘new’ clients if their length of participation did not exceed three months since enrolment date to 31 March 2014, the cut-off date for eligibility determination of time-defined inclusion criteria (*i.e.* age over 18, service receipt in the past 12 months, and injecting drug in the past three months). ‘Existing’

(or ‘old’) clients are those with length of participation exceeding three months prior to the cut-off date. Further elaboration of study inclusion criteria is provided in the sections that follow.

The study design, eligibility criteria, sampling methodology, and study questionnaire adhered to those used in the baseline assessment with minor modifications (Rumah Cemara, 2011). Here we elaborated the study design with attention to describing the sample size and selection and the process of the evaluation conduct.

### *Eligibility criteria*

In this final evaluation eligible study participants were adult ( $\geq 18$  years) PWID clients residing in one of the three implementing cities (Bandung, Bogor, Sukabumi) who received a service in the past 12 months and reported having injected drugs at least once in the past three months. Consent to participation was required.

### *Sample size, sampling frame and recruitment*

Sample size was estimated using the following ingredients: (1) an assumed programme effect of an increase in the proportion of PWID not sharing injecting equipment from 35% to 55% at the end of the project cycle; (2) a significance level of  $\alpha = 0.05$  (two-tailed) and an .80 power; and (3) a design effect of 2. We inflated the product ( $n = 186$ ) to account for non-completions. The final number in each city was allocated according to the estimated PWID size. **Table 1** presents the calculated sample size and the distribution for each city.

**Table 1.** Sample size and distribution

City	Estimated size (N)	Existing-new client ratio <sup>†</sup>	Sample (n)	
			Existing clients	New clients
Bandung	2,580 (32%)	3.41	53	16
Bogor	4,590 (57%)	6.50	106	16
Sukabumi	910 (11%)	2.96	15	8
<b>Total</b>	<b>8,080 (100%)</b>		<b>174</b>	<b>40</b>

<sup>†</sup> From observed distribution in the sampling frame

Sampling frame was obtained from a list of clients, grouped by city and unordered, with recorded birth and enrolment dates, and removed of all personal identifying information. Of 311 client records we found nine duplicate entries (Kota Bandung [ $n = 2$ ], Kota Sukabumi [ $n = 7$ ]) based on the identical client identification code and date of birth and removed these accordingly. Using a sampling function in a statistical package, we then randomly selected participants with the probability of selection weighted by the sample quota for each city and by the distribution of existing and new clients. Sample selection was performed by the consultants. The list was then incorporated into the sampling frame

with an extra indicator signifying selection status (0 = not selected; 1 = selected). Selected clients were then approached and invited for participation in the study. Clients who failed to participate were substituted for by the next unselected client available in the list, relative to the record position of the failure case.

#### *Study questionnaire and interview conduct*

A standard questionnaire used in all the other CAHR countries and at baseline was utilized. This questionnaire elicited responses on participant socio-demographic characteristics, injecting and sexual practices, experience with arrest, knowledge of HIV risk and safe-injecting practice, uptake of HIV testing and counselling, service availability and satisfaction, and state of wellbeing. Questionnaire was translated to Indonesian and piloted with peer educators and revised accordingly. We also added an item on the last date of service receipt before the cut-off date. The reason was that we also intended to evaluate an alternative construct of defining exposure by the intensity of service receipt with an 'active' client being an existing client who last received a service within three months before the cut-off date. Each completed questionnaire was coded using the participant's first letter of their first and last name in combination with their month and year of birth to index records anonymously.

Our team briefed enumerators in each city prior to data collection. In Kota Bogor the CAHR programme was run by Rumah Singgah PEKA, whereas in the other cities Rumah Cemara was the implementer. Enumerators were experienced staff (>1 year) from each implementing organization who had significant training in outreach education and peer support, and whose main job responsibility was in peer education or case management. We estimated that each enumerator could allocate three days each week for the purpose of data collection and handle 15 interviews in the four-week period of data collection beginning on 28 April 2014. Field supervision and quality check was routinely performed. Data collection was completed on 13 June 2014. The length of time required to complete a full set of questionnaire ranged from 40 to 60 minutes.

#### *Data analysis*

##### Evaluation of target achievement

The set target achievement was client composition comprising 50-70% new clients out of the total number (*Rumah Cemara CAHR Implementation Strategy*, 2013). We evaluated the performance against this indicator with a focus on the current sampling frame as opposed to the entire CAHR clientele. Apart from practicality, the sampling frame, equivalent to the entire clientele with the inclusion criteria applied, was composed of clients who were actively injecting and therefore were at an elevated risk of transmitting or contracting HIV and other blood-borne infections on whose prevention CAHR prioritizes. For this purpose we calculated the proportion of newly registered clients over the cumulative total clients for each year except for the baseline year 2011.

### Description of participant responses

For documenting general responses from participants we used cross-tabulation on each item question to present the results in the table and graphical formats. The proportion of each response option was also presented for mutually exclusive questionnaire items where participants could only choose one option from a given set of alternatives.

### Evaluation of trends and by length of participation

In our comparison with the baseline or between client types, we limited ourselves to key important indicators of behaviour change, knowledge, satisfaction, and wellbeing. We calculated proportions, medians and inter-quartile ranges (IQRs), or mean and standard deviations (SD) for each indicator in the two groups: baseline vs. final for our first analysis and existing vs. new clients and active vs. non-active clients for the concluding analysis in this report. Because we only had aggregate baseline data and most of which were reported in proportions, we reconstructed the mean and SD where these were unavailable, assuming a normal distribution. As individual client data were collected comparison between client types could be performed directly and no reconstruction was needed to estimate the statistics. We estimated SD from the reported minimum and maximum and mean values by dividing half the range (*i.e.* maximum – minimum) by a square root of twice the log of the sample (Donoho & Johnstone, 1994).

Finally, we calculated the mean scores of knowledge test on HIV/AIDS and injecting drug use, service satisfaction, and wellbeing and quality of life by dividing the total score by the number of responding clients or the number of observations (selected options) in cases where the question item allowed multiple selections (*e.g.* service satisfaction where participants first chose a number of services ever received and then evaluated their level of satisfaction). We scaled these items as follows. For the knowledge test we assigned the value one for each correct option and zero otherwise, leading to a maximum score of 13 or a zero-to-thirteen scale. We calculated a service satisfaction index from 0 (no satisfaction) to 10 (high satisfaction), assigning values to the three options ('very unsatisfied', 'average quality', 'very satisfied') with equally spaced intervals such that the highest level ('very satisfied') had a score of 10. This means that the two remaining options carried the decrement in satisfaction of one and two times the interval (*i.e.* 1 x 5, 2 x 5) respectively.

A similar scaling method was applied to the wellbeing and quality of life index where the highest-level option was anchored to one (healthiest/best state of PWID wellbeing) and the lowest to zero (the worst state of PWID wellbeing). Anchoring to zero and one mimics various validated health-related quality of life indices and facilitates ease of interpretation. However, the interpretation of the resulting score has relevance only to PWID in this study and is incomparable to similar measures obtained from other instruments or populations.

For categorical data we regrouped multiple response categories other than the top level into a single category and compared this with the top category, which conveys a highly desirable behaviour in HIV prevention such as consistent use of sterile injecting equipment or condoms. We used the test of equality of proportions to examine changes from baseline and the Pearson's chi-squared test to compare proportions by client type. Exact binomial and Fischer's exact tests were used in cases where one or several groups being compared contained a small sub-sample. Unpaired t-test and the Mann-Whitney test were used to compare means and medians respectively. We also evaluated another construct of programme exposure by access intensity (*i.e.* active *vs.* non-active clients) based on service receipt in the past three months as an alternative to our base case definition of programme exposure according to the length of participation.

#### *Data collection, preparation and management*

Data from paper-based questionnaire were entered into a Microsoft Access application specifically designed for data entry of this evaluation. Data were entered twice, independently by two of the consultants (AW and ALP). The resulting file format was then imported for statistical analyses. All statistical analyses were conducted using STATA version 13.0 (StataCorp, 2013).

#### *Ethics statement*

The application for ethical clearance to this study was submitted in April 2014 to Institute of Research and Community Service, Atma Jaya University, Jakarta. Clearance was granted as per 25 April 2014. Informed consent to participation was sought from all participants. Freedom to participate into the study or stop participation at any time during the interview and to not answer certain questions without consequences on subsequent service receipts was briefed to all prospective participants. Participants were compensated with cash or souvenirs equivalent to USD 10.00 for their time.

## Results

### Evaluation of target achievement

The calculated proportion of new clients was 77%, 48%, and 18% for years 2011-2012, 2011-2013, and 2011-March 2014 respectively, and was well within the target range of 50-70%. The achievement for 2014 may optimistically reach more than 50% by the year's end assuming a constant quarterly rate in recruitment.

### Descriptive results of endline survey

A full list of documented responses presented in tables and graphic formats can be found in the supplementary document accompanying this submission. Here we provide the summary. Most key behavioural questions are also discussed in further detail in our analyses by client type. Briefly, there were no large discrepancies across cities in terms of gender and age composition although migration and family support was considerably more prevalent in Bogor and there was more permanent employment for Bandung-based participants. Participants injected primarily heroin and there were indications that Bogor-based participants had a higher injecting risk profile judging from the difference in overdose and needle sharing prevalence compared with the other cities. More Bogor participants also injected in public spots. Sukabumi had the highest proportion of recent arrests (in the past 12 months). Again for Bogor, use of condoms was markedly different from the two cities, yet this city also boasted the highest proportion of participants on antiretroviral and self-reporting HIV-negative status. Care-seeking was less pronounced in Bandung with only about 4% receiving care in more than 2 occasions from the CAHR programme, or only at one-seventh intensity of what it was in Bogor and Sukabumi. Nevertheless, a good majority of participants reported high satisfaction for each service they ever received. NSP, viral hepatitis care, economic strengthening activities, and legal services were among those services sought after and needed. Lastly, confirming Bogor's conflicting situation, for the wellbeing and quality of life items the city registered higher access to care and more family support but coupled with the prevalence of physical pain and negative experience with law enforcement.

### Comparison with baseline

A total of 216 eligible participants consented into the study and completed the questionnaire. Participant characteristics and risk behaviour for the comparative analysis in trend since baseline are outlined in **Table 2**. The number recruited by city differed significantly except for Sukabumi, mirroring the current risk trend, with over half of participants (56%) recruited in Bogor. Enrolment of new clients also followed the current risk trend. In Sukabumi, however, we only recruited 38% of the planned new clients (3 out of 8), but the difference was substantial compared to the zero number recruited in this city during the baseline assessment. The endline participants were slightly older and

more likely to be born outside the city where they currently live and have employment of any kind ( $p < 0.001$ ). No other differences were noted in socio-demographic profile.

**Table 2.** Participant characteristics and risk behaviours relative to baseline

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Baseline (N1 = 190)	Endline (N2 = 216)	
<b>I. Characteristics and socio-demographics</b>			
<i>City</i>			
Bandung	90 (47)	69 (32)	<0.01
Bogor	68 (36)	121 (56)	<0.001
Sukabumi	32 (17)	26 (12)	0.15
<i>New clients</i>			
Bandung	59 (75)	17 (50)	<0.01
Bogor	20 (25)	14 (41)	0.08
Sukabumi	0 (0)	3 (9)	<0.01
Sex (male)	179 (94)	198 (92)	0.43
Age	32 (4.5)	34 (4.5)	<0.001
Education (completed high school)	180 (95)	207 (95)	1.00
Resident since birth	134 (71)	119 (55)	<0.001
Occupation (unemployed)	36 (19)	8 (4)	<0.001
Marital status (yes, no other partner)	107 (56)	121 (56)	1.00
Live alone (yes)	15 (8)	13 (6)	0.43
PWID sex partner (yes)	15 (8)	15 (7)	0.70
<b>II. Injecting practice</b>			
<i>Age at injection initiation</i>			
12-17 years	74 (39)	71 (33)	0.21
18-22 years	84 (44)	114 (53)	0.07
Not injecting in 30 days (yes)	42 (22)	3 (1)	<0.001
Injecting up to 3x/day (yes)	169 (89)	198 (92)	0.30
Primary drug heroin	181 (95)	212 (98)	0.09
Current receipt of OST (yes)	55 (29)	59 (27)	0.65
Overdose in 12 months	18 (9)	27 (13)	0.20

Variable/ characteristic [n1/n2]	<i>n</i> (%), mean or median (SD or IQR)		<i>p</i> -value
	Baseline (N1 = 190)	Endline (N2 = 216)	
Last injection with fresh needle (no)	17 (9)	16 (7)	0.46
Using used needle in 30 days (yes)	21 (11)	52 (24)	<0.001
Give, lend, sell needle in 30 days (yes)	23 (12)	26 (12)	1.00
Preloaded injection in 30 days (yes)	32 (17)	50 (23)	0.13
Sharing of equipment in 30 days (never)	92 (48)	76 (35)	<0.01
Injecting in public spots (yes)	102 (54)	107 (50)	0.42
First injection partner-assisted (yes)	168 (88)	182 (84)	0.25
<b>III. Police and law</b>			
Ever arrested (yes)	126 (66)	112 (52)	<0.01
Arrested in 12 months (yes) [126/112]	44 (35)	36 (32)	0.62
Ever in compulsory treatment (yes)	18 (9)	22 (10)	0.73
C. treatment in 12 months (yes) [18/22]	6 (67)	10 (45)	0.04*
<b>IV. Sexual behaviour</b>			
Intercourse in 12 months (yes)	175 (92)	180 (83)	<0.01
Sex with commercial partner (yes) [175/180]	27 (15)	26 (14)	0.79
Condom use (yes) in last intercourse with			
Spouse [141/139]	77 (55)	80 (57)	0.74
Casual partner [57/45]	28 (49)	29 (64)	0.13
Commercial partner [27/26]	19 (70)	16 (67)	0.39
Consistent condom use (yes) in 30 days with			
Spouse [112/116]	39 (35)	21 (18)	<0.01
Casual partner [23/25]	5 (22)	10 (40)	0.18
Commercial partner [9/9]	7 (78)	6 (67)	0.42*
<b>V. Knowledge of HIV and safe injecting</b>			
Knowledge score (scale: 0 [min]—13 [max])	11.95 (2.98)	12.00 (1.17)	0.82
<b>VI. HIV testing</b>			
Ever tested (yes)	172 (91)	202 (94)	0.25



Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Baseline (N1 = 190)	Endline (N2 = 216)	
Tested in 12 months (yes) [172/202]	56 (33)	75 (37)	0.42
Disclosed HIV status (positive) [151/198]	98 (65)	128 (65)	1.00
Receipt of ART [98/128]	76 (77)	107 (84)	0.18
<b>VII. Service availability &amp; satisfaction <sup>a</sup></b>			
Satisfaction score (range: 0 [poor]—10 [best])	8.38 (2.38)	8.96 (1.31)	<0.01
<b>VIII. Wellbeing &amp; quality of life <sup>b</sup></b>			
Wellbeing score (range: 0 [worst]—1 [best])	0.70 (0.28)	0.77 (0.10)	<0.001

**Note:**

Non-response equates the worst option; Baseline means and medians (also standard deviations and interquartile ranges) were reconstructed from reported aggregate information; PWID = people who inject drugs; OST = oral substitution treatment; ART = antiretroviral therapy; <sup>a</sup> 951 baseline observations and at final evaluation accounting for individual variations in the number of services ever received; <sup>b</sup> Excluding one female-specific item question on sexual reproductive health service.

n1 = number available at baseline; n2 = number available at endline

p value significant at <0.05; \* = exact p-value from the binomial probability test

Contrary to the widely held belief that injecting drug use was in a long decline, we found that a substantial majority of respondents were actively injecting drugs at least on one occasion per month. This trend holds for all cities, with the proportion of participants injecting drugs at least once a week ranging from 65% (Bogor and Bandung) to 81% (Sukabumi). Heroin remained the primary drug and there was no change in OST uptakes since baseline. However, reuse of needles and needle sharing more than doubled the proportion observed in the baseline assessment (11% vs. 24%) although sharing of other equipment (spoon, cooker, filter, and water) decreased. The increase in needle sharing could be close to double the baseline proportion (95% confidence interval [CI]: 5.78—20.23%). In legal aspects current participants were less likely to have been arrested, incarcerated, or forced into treatment involuntarily.

Current participants were also less sexually active relative to their baseline counterparts and had a lower rate of consistent condom use in spousal sex in the past 30 days before the survey (diff: 17%; CI: 5.73—28.27%;  $p < 0.01$ ) although for all the other partnership types consistent condom use did not differ from baseline. In absolute terms the probability of consistent condom use for the current participants could be as low as 11%.

Undeniably, we observed a significant difference in consistent condom use by self-reported HIV status ( $p = 0.04$ ), with more participants self-reporting an HIV-positive status more likely to opt for

condom in spousal sex than their HIV-negative counterparts. However, at only 25% of the HIV-positive participants this figure was dismayingly low. Although this change occurred despite no change in HIV knowledge relative to baseline, we found that among those self-reporting being HIV-positive, more consistent condom use in spousal sex was associated with better HIV knowledge (difference in test score: 0.53; CI: 0.04—1.02;  $p = 0.04$ ). Exploring the participants by HIV status, we found no association between needle sharing and HIV knowledge. The proportions were similar for the key aspects of HIV testing, including uptakes and self-reported seroprevalence.

Current participants were more satisfied with the services provided in the CAHR programme and had a higher mean score for quality of life compared to baseline.

#### *Comparison by client type*

Except Sukabumi, all cities met the pre-planned sampling strategy including the distribution of client type. It was revealed in the process that miscalculations occurred in extracting data for constructing the sampling frame for this city. Overall, 23 existing clients and 3 new clients were recruited in Sukabumi. Participant characteristics and risk behaviours for the comparative analysis by client type are outlined in **Table 3**.

The socio-demographic characteristics by client type were similar except for the fact that newly enrolled clients were comparatively younger than the existing clients ( $p < 0.01$ ). A majority of participants were never in receipt of care previously with no difference in proportions by client type ( $p = 0.48$ ). Participants who were existing clients tended to inject drugs on one occasion every week and be enrolled in an OST programme and had less likelihood to share injecting paraphernalia and supplies with others compared to new clients. There was no significant difference in experience of law enforcement, sexual behaviours, HIV knowledge, service satisfaction, and quality of life among the two categories of client type by programme exposure. New clients were less likely to have ever tested for HIV ( $p < 0.03$ ). That more new clients underwent HIV testing in the past year suggests the effect of engagement with the CAHR programme on testing uptakes. At this stage of analysis evidence was scarce to suggest that longer programme exposure resulted in better health outcomes.

**Table 3.** Comparison of participant characteristics and risk behaviours by client type

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Existing client (N1 = 182)	New client (N2 = 34)	
<b>I. Characteristics and socio-demographics</b>			
City: n (% of city total)			0.06*
Bandung	52 (75)	17 (25)	
Bogor	107 (88)	14 (12)	
Sukabumi	23 (88)	3 (12)	
In receipt of other care			0.48
Yes, previously	47 (26)	10 (29)	
Yes, at present	53 (29)	8 (24)	
No	82 (45)	16 (47)	
Sex (male)	165 (91)	33 (97)	0.22
Age	35 (32–37)	33 (30–35)	<0.01
Education (completed high school)	140 (77)	25 (74)	0.33
Resident since birth (yes)	98 (54)	21 (62)	0.39
Occupation (fully employed)	105 (58)	18 (53)	0.61
Marital status (yes, no other partner)	105 (58)	16 (47)	0.25
Live alone (yes)	9 (5)	4 (12)	0.13
PWID sex partner (yes)	15 (8)	0 (0)	0.14
Have children (yes)	105 (58)	16 (47)	0.25
<b>II. Injecting practice</b>			
Age at injection initiation	18 (17–20)	19 (17–20)	0.56
Injecting in a week (yes)	130 (71)	16 (47)	0.02
Injecting up to 3x/day (yes)	166 (93)	32 (97)	0.37
Primary drug (heroin)	178 (98)	34 (100)	0.38
Current receipt of OST (yes)	55 (30)	4 (12)	0.03
Overdose in 12 months	25 (14)	2 (6)	0.27
Last injection with fresh needle (no)	15 (8)	1 (3)	0.25
Using used needle in 30 days (yes)	43 (24)	9 (26)	0.72
Give, lend, sell needle in 30 days (yes)	27 (15)	1 (3)	0.06
Preloaded injection in 30 days (yes)	43 (24)	7 (21)	0.70

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Existing client (N1 = 182)	New client (N2 = 34)	
Sharing of equipment in 30 days (never)	112 (62)	28 (82)	0.02
Injecting in public spots (yes)	92 (51)	15 (44)	0.49
First injection partner-assisted (yes)	150 (82)	32 (94)	0.09
<b>III. Police and law</b>			
Ever arrested (yes)	97 (47)	19 (56)	0.33
Arrested in 12 months (yes) [97/19]	32 (33)	4 (27)	0.63
Ever in compulsory treatment (yes)	20 (11)	2 (6)	0.37
C. treatment in 12 months (yes) [20/2]	10 (50)	0 (0)	0.29*
<b>IV. Sexual behaviour</b>			
Intercourse in 12 months (yes)	154 (85)	26 (77)	0.24
Sex with commercial partner (yes) [154/26]	21 (14)	4 (15)	0.51*
Condom use (yes) in last intercourse with			
Spouse [123/17]	68 (55)	12 (71)	0.23
Casual partner [35/10]	23 (66)	6 (60)	0.51*
Commercial partner [21/3]	13 (62)	3 (100)	0.27
Consistent condom use (yes) in 30 days with			
Spouse [105/11]	17 (16)	4 (36)	0.10
Casual partner [22/3]	8 (36)	2 (67)	0.54*
Commercial partner [7/2]	4 (57)	2 (100)	0.50*
<b>V. Knowledge of HIV and safe injecting</b>			
Knowledge score (scale: 0 [min]—13 [max])	12.05 (1.09)	11.76 (1.54)	0.18
<b>VI. HIV testing</b>			
Ever tested (yes)	173 (95)	29 (85)	0.03
Tested in 12 months (yes) [173/29]	59 (34)	16 (55)	0.03
Disclosed HIV status (positive) [170/28]	111 (65)	17 (61)	0.57
Receipt of ART [111/17]	92 (83)	15 (88)	0.58
<b>VII. Service availability &amp; satisfaction</b>			

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Existing client (N1 = 182)	New client (N2 = 34)	
Satisfaction score (range: 0 [poor]—10 [best])	8.94 (1.30)	9.01 (1.37)	0.79
<b>VIII. Wellbeing &amp; quality of life <sup>b</sup></b>			
Wellbeing score (range: 0 [worst]—1 [best])	0.76 (0.10)	0.77 (0.10)	0.98

Note:

Non-response equates the worst option; PWID = people who inject drugs; OST = oral substitution treatment; ART = antiretroviral therapy; <sup>b</sup> Excluding one female-specific item question on sexual reproductive health service.

n1 = number available for existing clients; n2 = number available for new clients

p value significant at <0.05; \* = exact p value from the Fischer's exact test

### Comparison by access intensity

We also evaluated an alternative measure of programme exposure differentiated by whether participants sought and obtained care in the last 3 months prior to the survey. By this categorization we wished to highlight, if any, the effect of active engagement with CAHR. **Table 4** presents the key characteristics and risk behaviours. Bogor was the city with most active client engagement nominally ( $n = 87$ ; 72%), followed by Sukabumi whose clients were all actively seeking care at CAHR programme in the last three months. In Bandung approximately half of clients were actively seeking care at CAHR programme. This could be due to the multiplicity of similar programmes run by different agencies, whereas in Sukabumi Rumah Cemara was the only key player providing comprehensive care, including NSP. Nearly half were never in receipt of care previously regardless their engagement status ( $p < 0.30$ ).

**Table 4.** Comparison of participant characteristics and risk behaviours by access intensity

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Active client (N1 = 147)	Non-active client (N2 = 69)	
<b>I. Characteristics and socio-demographics</b>			
City – n (% of city total)			<0.001*
Bandung	34 (49)	35 (51)	
Bogor	87 (72)	34 (28)	
Sukabumi	26 (100)	0 (0)	
In receipt of other care			0.30
Yes, previously	40 (27)	17 (25)	
Yes, at present	40 (27)	21 (30)	
No	67 (46)	31 (45)	
Sex (male)	138 (94)	60 (87)	0.09
Age	34 (32–37)	34 (31–37)	0.58
Education (completed high school)	111 (76)	54 (78)	0.66
Resident since birth (yes)	80(54)	39 (57)	0.77
Occupation (fully employed)	80 (54)	43 (62)	0.27
Marital status (yes, no other partner)	79 (54)	42 (61)	0.33
Live alone (yes)	11 (7)	2 (3)	0.19
PWID sex partner (yes)	11 (7)	4 (6)	0.45*
Have children (yes)	84 (57)	37 (54)	0.63
<b>II. Injecting practice</b>			
Age at injection initiation	19 (17–20)	18 (17–20)	0.10
Injecting in a week (yes)	103 (70)	43 (62)	0.50
Injecting up to 3x/day (yes)	138 (94)	60 (87)	0.22
Primary drug (heroin)	146 (99)	66 (96)	0.10
Current receipt of OST (yes)	38 (26)	21 (30)	0.48
Overdose in 12 months	22 (15)	5 (7)	0.11
Last injection with fresh needle (no)	6 (4)	10 (14)	<0.01
Using used needle in 30 days (yes)	36 (25)	16 (23)	0.84
Give, lend, sell needle in 30 days (yes)	19 (13)	9 (13)	0.98

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Active client (N1 = 147)	Non-active client (N2 = 69)	
Preloaded injection in 30 days (yes)	43 (24)	7 (21)	0.70
Sharing of equipment in 30 days (never)	39 (27)	11 (16)	0.09
Injecting in public spots (yes)	81 (55)	26 (38)	0.02
First injection partner-assisted (yes)	126 (86)	56 (81)	0.39
<b>III. Police and law</b>			
Ever arrested (yes)	79 (54)	33 (48)	0.42
Arrested in 12 months (yes) [79/33]	28 (35)	8 (24)	0.25
Ever in compulsory treatment (yes)	16 (11)	6 (9)	0.62
C. treatment in 12 months (yes) [16/6]	7 (44)	3 (50)	0.58*
<b>IV. Sexual behaviour</b>			
Intercourse in 12 months (yes)	124 (84)	56 (81)	0.56
Sex with commercial partner (yes) [124/56]	15 (12)	10 (18)	0.30
Condom use (yes) in last intercourse with			
Spouse [98/42]	55 (56)	25 (60)	0.71
Casual partner [30/15]	18 (60)	11 (73)	0.34*
Commercial partner [15/9]	10 (67)	6 (67)	1.00
Consistent condom use (yes) in 30 days with			
Spouse [81/35]	11 (14)	10 (29)	0.06
Casual partner [18/7]	7 (39)	3 (43)	0.60*
Commercial partner [5/4]	3 (60)	3 (75)	0.64*
<b>V. Knowledge of HIV and safe injecting</b>			
Knowledge score (scale: 0 [min]—13 [max])	11.93 (1.18)	12.17 (1.14)	0.16
<b>VI. HIV testing</b>			
Ever tested (yes)	138 (94)	64 (93)	0.75
Tested in 12 months (yes) [139/64]	59 (42)	16 (25)	0.02
Disclosed HIV status (positive) [138/64]	86 (62)	42 (66)	0.65
Receipt of ART [86/42]	74 (86)	33 (79)	0.28
<b>VII. Service availability &amp; satisfaction</b>			
Satisfaction score (range: 0 [poor]—10 [best])	9.06 (1.18)	8.70 (1.54)	0.06

Variable/ characteristic [n1/n2]	n (%), mean or median (SD or IQR)		p-value
	Active client (N1 = 147)	Non-active client (N2 = 69)	
<b>VIII. Wellbeing &amp; quality of life <sup>b</sup></b>			
Wellbeing score (range: 0 [worst]—1 [best])	0.76 (0.10)	0.78 (0.11)	0.11

**Note:**

Non-response equates the worst option; PWID = people who inject drugs; OST = oral substitution treatment; ART = antiretroviral therapy; <sup>b</sup> Excluding one female-specific item question on sexual reproductive health service

n1 = number available for active clients; n2 = number available for non-active clients

p value significant at <0.05; \* = exact p value from a Fischer's test

Active clients had higher likelihood to inject with a clean needle on last occasion and prepare and inject drugs in public spots, with more than half (55%) reporting public injecting compared to non-active clients (38%). A higher proportion of non-active clients were currently enrolled in OST while the number of overdose events in this group was half that of the active client group. Although this might at first suggest a perverse effect of engagement, these associations were not statistically significant ( $p = 0.48$  and  $0.11$ , respectively). Active engagement also appeared to result in lower condom use in spousal sex at half the proportion recorded for the non-active group (14% vs. 29%). Furthermore, we found that the relationship between active engagement and condom use in spousal sex was similar by client type ( $p = 0.25$  and  $0.09$  for existing and new clients, respectively), suggesting that both existing and new clients were equally actively engaged in care but also equally likely to have riskier spousal sex acts. With a similarly high rate of HIV prevalence (>60%), the consequences in onwards transmission to sexual partners and their children are severe.

Clients who were not actively engaged in care were also less likely to have undergone HIV testing in the past year (diff.: 17%; CI: 3.5—30%). We found no significant difference as regards the other socio-demographic and risk behaviour characteristics and outcomes.



## Discussion

### Summary of findings

We have presented our findings in the previous section. Key notes worth reemphasizing are summarized as follows:

- First, quantitatively **programme output achievement** was well within the target range in all the three cities. Our examination of sampling frame and benchmarking with the targeted indicators lends support to this achievement.
- Secondly, the sweeping epidemiological trend brought changes to the composition of participants in each city. Importantly, **current participants and their spouses are at an elevated risk** of contracting HIV and other blood-borne infections. In comparison to baseline, current participants were twice as likely to reuse or use others' needles, with significantly less condom use in spousal sex. At the same time current participants also enjoyed **higher service quality and improved wellbeing**.
- Thirdly, not only did programme exposure lead to uptake, it also appeared to negatively influence risk to **riskier injecting practice and spousal sex** for clients well exposed in the programme. Higher injecting frequency, sharing of equipment, public injecting, and inconsistent condom use were noted in our analyses.
- Lastly, there was evidence to suggest that **the programme did expand care** to individuals who would otherwise have been difficult to reach by any other means. For nearly half of participants (45%) CAHR was their first contact to other care and services they would need.

The implications of these key findings are presented in the paragraphs that follow.

### Sample and risk characteristics

We began with a sampling frame comprising 302 eligible clients (injecting in past 3 months) out of 1,117 total clients registered in the database (27%). Of this number 216 completed participation in the endline evaluation survey (71%). An adequate representation of high-risk PWID clients was preserved in the present evaluation sample. Exploring our sampling frame further we found a large discrepancy from what would be expected in the baseline sampling frame. Taking the baseline year 2011, we should expect at least the same number of clients registered for year 2011 in our sampling frame ( $n = 29$ ) as in the baseline sample ( $n = 190$ ) (Rumah Cemara, 2011). That this was not the case suggests a high rate of programme attrition (defined as clients not seen in 12 months) or a wholesale reduction in injecting drug use after 2011 for the baseline cohort.

In the current sampling frame 71% of clients entered care in more recent years (2012-2013) or 90% if including 2014; yet we found that current participants and their spouses were at a higher risk of contracting blood-borne infections with higher rates of needle reuse and sharing and spousal condom-less sex. The differential socio-demographic characteristics may reveal that older age, better prospect of employment, and migration into the city of survey are risk proxies on whom the programme should focus in the future. Age in particular re-emerged as a potential risk proxy in our analysis by client type in that more frequent injection and needle sharing were more prevalent in older existing clients (26 vs. 33 years in mean age for injecting monthly and injecting more than once a month; 32 vs. 34 years for needle sharing and always using own needle).

In terms of risk, however, the comparison of our sampling capture with the baseline sample revealed an ‘ebb and flow’ trend in injecting drug use among a particular cohort (in this case the 2011 cohort). The current cohort, with a higher risk profile, might show a different trend of risk period (*i.e.* period in which clients remain injecting drugs), and even if this period was as short as the experience of the baseline cohort, its public health implications are enormous. First, in examining whether the propensity to share needles or equipment would differ by self-reported HIV status, we found that both groups reporting being positive or negative were similar in their risk of needle sharing. The mixing of these two groups can occur any time and facilitate effective transmission. It is hard to imagine that the epidemic, however mature in our study setting, could be lessened by ‘sero-sorting’ (*i.e.* selection of needle sharing partners based on identical HIV status) either naturally (because most are already infected) or socially (by knowledge of the other’s HIV status) given this finding (Burt, Thiede, & Hagan, 2009). Secondly, if uncurbed, this risk will manifest in a greater number of HIV infections in sex partners and their children, which along with hepatitis C in PWID, are the centrepiece of the current advocacy effort by major community-based organizations in Indonesia. Programmes addressing these other populations and related risks should be directed to also engage with (male) PWID.

### Programme effectiveness

In our analyses we found what appeared to be a perverse programme effect in that longer or more active participation could result in increased risk behaviours. The onus on CAHR is even greater as the data suggests that the recruitment focus of the programme is on PWID who are never in receipt of care before their contact with CAHR. Care must be taken in interpreting this finding. First, as explained previously, the present sample comprised a different cohort altogether having the characteristics that could influence risk behaviours. The cross-sectional nature of this evaluation also limits inference of causality in programme effect (*i.e.* is it true that the programme caused harms or is it because the programme attracted higher-risk individuals?).

Again, it is worth reiterating the predominance of more recent clients, with a maximum of 2 years of experience being in the CAHR programme. An example of how different these characteristics were relative to the baseline and whether these differences could be inferred with confidence to have been the result of current programme engagement, we take the case of lifetime experience of arrest which was recorded at a lower rate in our current sample (52% vs. 66%). The fact that experience of recent arrest (in 12 months) was similar from baseline suggests that advocacy work since 2011 aimed at creating a non-punitive approach to drug use has yet to contribute significantly to arrest rates and this difference would be more plausibly explained by the fact that the present cohort generally had lower incarceration experience before enrolment into the programme. On the other hand, shorter programme indicators can be meaningfully measured on the basis of the accruing expected behaviours in each month, and our findings beg the question around the extent of programme engagement since baseline in 2011.

The relative increase in needle reuse and sharing rates in the past 30 days relative to baseline was high (11% vs. 24%) and the presence of this large difference could not be attributed to data collection or lapses of participants' recall capacity when responding to the question. Except for sharing of injecting equipment all of the behavioural indicators for injecting drug use were either similar or worse compared to baseline although statistically only injecting frequency showed a significance. A similar logic can be applied to explain the higher condom-less spousal sex events. Worthy of note, this increase in sexual risk unfolded along with a decline in the total sex events. Minimal improvements in risk behaviours were also observed in our comparison by client type and access intensity. We shall return to the discussion on increased risks in the final section of this chapter.

To gauge the extent of programme engagement of the implementing organizations requires an analysis of process indicators and is beyond the scope of this report. However, to suggest a possible problem with operational performance we can look into the difference in performance by city as each more or less enjoys a considerable managerial autonomy. We stratified the two problematic behavioural indicators plus another one that is considered most basic that must be improved and maintained as a precondition to behavioural change: knowledge of HIV and injecting drug use. For ease of interpretation we grouped the knowledge score into those in the upwards of the total mean score (12, maximum: 13) and under. The results are summarized in **Table 5**. The behavioural indicators significantly differed by city. Bandung and Bogor had a sizable number of participants who injected using a used needle and had spousal sex without condom in the past month, respectively. HIV knowledge was the lowest in Sukabumi but appeared to have no influence on these behaviours, if anything.

**Table 5.** Problematic indicators by city

Indicator	City – n (% of city)			p-value
	Bandung	Bogor	Sukabumi	
Using used needle in 30 days (yes)	24 (35)	26 (22)	2 (8)	0.01
Condom with spouse in 30 days (no)	19 (61)	62 (95)	14 (70)	<0.001
HIV knowledge (>mean score)	25 (36)	59 (49)	6 (23)	0.03

p value significant at <0.05

### Satisfaction and quality of life (wellbeing)

Current participants were more satisfied with the programme and had a higher quality of life score relative to baseline. Both new and existing clients were equally satisfied and content with life although there was a tendency of higher satisfaction for those actively seeking care. Higher satisfaction may be the result of programme maturity with accumulated experience to cater to the needs of clients more effectively. Quality of life, on the other hand, encompasses disparate dimensions from physical health to the socio-economic aspects of livelihood. We tested if needle reuse and sharing or condom use in spousal sex was associated with service satisfaction or quality of life and found that a lower mean score for quality of life predicted a higher likelihood of needle reuse and sharing (0.78 vs. 0.74;  $p = 0.03$ ) but not for condom use. Satisfaction level did not influence either behaviour. Instability and a poor state of wellbeing have been well described as contributing to risky injection drug use. For sex, whose protection from fluid contamination trades off with satisfaction, the logic may not be as straightforward as the use of clean needles, which are always preferred when and where accessible.

### Condom use in spousal sex: pleasure and procreation

We dedicate this sub-section to a further discussion on condom use in spousal sex. It is understood that participants perceived imminent risks of sexually transmitted diseases in non-spousal sex acts which motivates condom use, and this may explain the similarity in proportions using condom consistently with casual and commercial sex partners. However, in spousal sex each partner seeks to gain most satisfaction which can potentially overshadow condom negotiation from either partner. Participants asked for reasons for missing condom use in spousal sex stated ‘lower sensation from condom use’ (67%) and ‘partner insistence’ (83%) as the motivation for condom-less sex. We were interested to see if procreation also plays a major role in influencing consistent condom use in spousal sex and found no such association ( $p = 0.75$ ). In other words, the hypothesis that couples with no or one child will care less about consistent condom use until the target number of children is met was not justified in our sample, leaving pleasure seeking albeit risky as the only explanation for condom-less sex.

### Hard-to-reach clients

CAHR has expanded care to difficult groups of PWID who would otherwise have not been able to obtain care they needed. A related important question is whether outcomes were different for clients who had no other means of access to care. We found that while this group had better outcomes in needle sharing relative to clients who previously or concurrently had enrolment with other providers, condom-less spousal sex was more prevalent in this group with close to 90% reporting inconsistent condom use in the past 30 days ( $p = 0.05$ ).

### Programme engagement and increased risks

We now present a case for dramatic programme improvements in light of our exploration into the plausible alternative factors explaining the risk behaviours observed in this endline evaluation. As we described previously, the current implementation enrolled a different cohort to the one participating in the baseline evaluation. We also made comparison based on the length of programme participation and access intensity with the present cohort. This afforded us an enriched overview to understand the possible explanation behind the problematic behavioural indicators. We placed a strong emphasis on needle reuse and sharing and spousal sex because of the efficiency with which HIV can be transmitted (intravenous injection is most efficient) and the priority in the current transitioning pattern of the epidemic in Indonesia (sexual transmission with further consequence on parental transmission to children).

One theory worth exploring to explain the increase in the problematic indicators over time is that the sample captured in this evaluation entered care with an alarmingly high risk and the programme impacted on the risk behaviours meaningfully although, despite the risk reduction, still standing at a higher rate than in the baseline. This hypothesis received support from the preponderance of a newer cohort of clients with little mixing with the baseline cohort (only 10% of clients in our sampling frame enrolled care in baseline year 2011). Confidence in this hypothesis requires measurements of key risk behaviours of the endline cohort at the time of enrolment, which unfortunately were not available to us. It is, however, more plausible to approximate the risk level at enrolment for the present cohort by looking at the risk characteristics of newer clients who by definition were still early in terms of programme engagement (<3 months since the date of enrolment at the time of the survey). As stated above, our results suggest that newer clients and those not actively seeking care had a better risk profile. If we are prepared to accept that care seeking of participants in this evaluation was induced by risk behaviours (as should have been the case in practice where sicker people tend to seek treatment more aggressively), and not the reverse (treatment induces the disease it purports to cure), as is expected of a health programme, then what we might have observed in our current sample was risk escalation since entering care.

We were perplexed by this finding. Participants reported receiving NSP, condoms, and education on risk reduction and rated these services more favourably than the reported baseline figures. The needle sharing rates reported at baseline (13%) were in general agreement with the results from a larger study also conducted in 2011 in which 18% of its Bandung sample of community PWID reported needle sharing in the past week, a decline from 24% in 2007 (Ministry of Health, 2011). We checked the weight of each city in their relative contribution to the overall conclusion of a risk increase since baseline by excluding participants from a city and found that the difference remained significant for both indicators irrespective of the city removed. Therefore, we are confident that there was a real and meaningful pattern of increased risk behaviours after 2011 in all cities.

The hypothesis of risk escalation post-enrolment indicates sub-optimal programme engagement and finds support from our analysis of programme performance in each city with respect to the problematic indicators. If we assumed that risk behaviours naturally progressed if unchecked, then given our sample it was likely that after three months into enrolment clients would naturally develop a riskier profile by which time care became highly essential. In other words, timely engagement that would have been essential to alter the risk behaviours early into the programme was minimal. Care was allocated on the basis of risk severity at the expense of lower-risk clients. This hypothesis is consistent with the care-seeking behaviour of the active clients observed in our sample. Drug market dynamics and other external changes could explain the different risk profile of the present cohort relative to the baseline cohort but had less relevance in explaining the sub-group differences of the present cohort. Given that this finding was highly unexpected at the outset of this evaluation, we cannot fathom if further receipt of care would reverse the risk behaviours as the data was not collected in that anticipation. In our sampling frame clients on average had been in the programme for 15 months, and the period of risk escalation may well extend beyond this average period, raising the importance of timely receipt of care.

## Limitations

While the programme expanded the care base to those in need, this report found minimal support to conclude of effective programme implementation qualitatively pertaining to changes in risk behaviours. We caution that our findings should be carefully interpreted due to the inherent biases in observational studies. We implemented simple random sampling, which while not at par with networked sampling methodologies, fit our purpose for this evaluation.

Our comparison with baseline figures relied on data reconstruction which utilized aggregate figures on some mathematical assumptions, particularly when estimating standard deviations. We limited mean comparison to as few as possible and opted for reconstructing extracted data to proportions with nonparametric comparison and fewer assumptions. Importantly, comparing outcomes at two time points with a considerable interval in between (3 years) may not yield results with confidence as drug market dynamics and the enabling environment might have changed since baseline and these were not accounted for in our analyses (Kimmons, 2013; United Nations Office on Drugs and Crime, 2013). Neither did our analyses attempt to control for any confounding. As we have stated at the outset, our second report will utilize regression models to control for confounding and will yield confirmatory results to those documented herewith. The evaluation question, however, is primarily focused on programme effectiveness rather than documenting changes in trends since baseline.

Lastly, we expected social desirability and other reporting biases in our study. Studies suggest that self reports related to HIV status and key risk behaviours can be valid and reliable measures (Bignami-Van Assche, Chao, Anglewicz et al., 2007; Weinhardt, Forsyth, Carey et al., 1998). We believe that our comparison groups (baseline and endline clients, existing and new clients, active and non-active clients) were equally subject to these biases and thus we might have lost some precision without a possibility of a counter conclusion.

## Conclusion

The CAHR community programming as implemented in three cities of West Java, Indonesia, has resulted in higher satisfaction and better quality of life for its clients relative to the baseline situation, with negative changes in key risk behaviours, most notably needle reuse and sharing rates and consistent condom use in spousal sex. Programme exposure was seemingly perversely associated with riskier injecting practices that could not be explained by any other characteristics within the methodological framework of our analyses than sub-optimal early programme engagement, thereby permitting risk behaviours to take on their natural course. Changes to the enabling environment could be the factors underlying the risk increase since baseline but not for the risk escalation of the longer and active clients. Taken together, we found little support to conclude of effective programme implementation qualitatively pertaining to changes in risk behaviours. Quantitatively the targeted number of new clients was met with positive implications on the expanded access to care to those in need.

The community survey revealed a shrinking pool of actively injecting PWID clients but with higher risks of contracting and transmitting HIV and blood-borne or venereal diseases – a significant threat to the community and families when the drug market dynamics sway in favour of a larger heroin supply. Our results are applicable to the general PWID population in the three cities with some restriction in Bandung owing to the presence of similar providers with a distinct client base. Timely and continual engagement with clients since entry into the programme is essential to ensure positive outcomes to the community and families.

We discerned a seasonal trend in injecting drug use since 2011 with changing cohort composition and, with it, risk profile. All across the nation programmatic focus has been reoriented to HIV sexual transmission as opposed to injecting drug use in response to an ever increasing number of new sexually acquired cases since 2007. The disinvestment in harm reduction that followed presents an insurmountable challenge for adjustments in capacity to effectively respond to the changing trend in injecting drug use in a timely manner and could also contribute to the changing risk patterns. Integrating the issue of PWID health in all the other HIV programmes should be a priority short-term strategy while still advocating for more investments in harm reduction innovations.



## Recommendations

The following is a set of recommendations at the programmatic and organizational levels, not in any particular order of importance or urgency. These are by no means an exhaustive list. We feel that the following recommendations and steps to be taken are of utmost importance and attainable in the near future.

*First*, we firmly believe that timely response to the changing epidemic patterns requires as its first step strategic information on the basis of which evidence-informed decisions are made. Tracking risk behaviours over time essentially can be integrated in routine practice given a fixed set of indicators and **adequate monitoring capacity**. Had this system already been in place, the lost opportunity in risk reduction could have been minimized before unnecessarily reaching an alarming level. We are aware of many sophisticated stand-alone systems for this purpose, including SyrEx2 – a data management system introduced by the International HIV/AIDS Alliance Ukraine. We feel that it is best that Rumah Cemara reflects on its mission and objectives that the performance indicators can be set and subsequently integrated into the standard monitoring system permanently. This can be situated within a larger knowledge management framework that encapsulates the whole enterprise and all organizational activities.

*Second*, we must highlight the possibility that funding to CAHR activities will be disrupted or discontinued following the end term of the project cycle. This report in the spirit of nurturing a sustainable harm reduction response has presented a case for adjustments to the current funding given the changing trend in injecting drug use. We therefore emphasize that **funding security for continual engagement** in harm reduction should be a top-priority agenda immediately after the release of this report.

*Third*, we strongly recommend intensifying the **back-to-basic approach to harm reduction** with relentless information campaign, intensive field outreach, robust NSP distribution, and integrated referrals. These are the proven methods that we know work and therefore have a greater chance to reverse the negative trends on correct implementation and **timely delivery** beginning since enrolment. Standard package of care should be defined, materials contextually fit, procedures codified and standardized, and costs estimated. Specifically, in Bandung and Bogor safe injecting methods should be promoted and in Sukabumi HIV knowledge significantly improved. Coupled with expanded access to those who are in need but have never received care, the enhanced programme is expected to positively impact the community at a greater scale.

*Fourth*, this report brought attention to the need for partner or couples sex/HIV education and better understanding of sexual and parental transmission for all clients. Knowledge of parental transmission scores low in Bandung and Sukabumi (mean score: 2.32, 2.23, and 2.67 out of total 3 for Bandung,

Sukabumi, and Bogor;  $p < 0.001$ ) while Bogor recorded the largest number of condom-less spousal sex despite achieving the highest score. Sexual education content that acknowledges the reproductive rights of PWID and people living with HIV and highlights safer achievement of sexual pleasure should be devised in collaboration with practice and/or clinical professionals. We also recommend **integration with programmes for affected women and children** to introduce male partners and parents to safer spousal sex.

*Lastly*, this report also acknowledges the potential performance problems that may influence achievement of target outputs and outcomes. It is imperative that the Management seek a dialogue to identify the problem areas and resolve these in an appropriate manner. We also recommend an **audit of process indicators** and records of activities as well as performance benchmarking following immediately, preferably by a third party, to eliminate the possibility of performance biases in future implementation.

We have presented the recommendations for future CAHR implementation. These five recommendations can be executed in practice in the **TIMELY** manner as described in **Box 1**.

**Box 1.** The TIMELY programme improvements

- |                         |  |
|-------------------------|--|
| <b><u>T</u>rain</b>     | staff to effectively identify and deliver the needed care in proven methods and clients and their partners to adopt safer injecting practices and a more gendered approach to sex that also recognizes the rights of women and children to be free of HIV and other blood-borne and venereal diseases. |
| <b><u>I</u>ntensify</b> | harm reduction work with outreach deepening, relentless education, integrated referrals and continual engagement.  |
| <b><u>M</u>onitor</b>   | systematically the changing trends in key risk behaviours to have an evidence-informed perspective in shifting and realigning the programme direction immediately after the fact.  |
| <b><u>E</u>xpand</b>    | care to those who otherwise would not have been able to find access. This is the key strength of CAHR and should be exploited fully with the intensive application of the standard harm reduction approach.  |
| <b><u>L</u>ow-cost</b>  | care is essential to generate a meaningful programme impact. This has been broadly realized to a certain extent with the recent implementation of universal health coverage. There will be more room for efficiency gains with integrated services and fidelity to proven methods.                     |
| <b><u>C</u>omply</b>    | with the standard conduct of harm reduction and evidence-informed strategies.  |

## References

- Bignami-Van Assche, S., Chao, L. W., Anglewicz, P., Chilongozi, D., & Bula, A. (2007). The validity of self-reported likelihood of HIV infection among the general population in rural Malawi. *Sexually Transmitted Infections*, 83(1), 35-40. doi: 10.1136/sti.2006.020545
- Burt, R. D., Thiede, H., & Hagan, H. (2009). Serosorting for hepatitis C status in the sharing of injection equipment among Seattle area injection drug users. *Drug and Alcohol Dependence*, 105(3), 215-220. doi: <http://dx.doi.org/10.1016/j.drugalcdep.2009.07.005>
- Des Jarlais, D. C., Feelemyer, J. P., Modi, S. N., Arasteh, K., Mathers, B. M., Degenhardt, L., & Hagan, H. (2012). Transitions from Injection-Drug-Use-Concentrated to Self-Sustaining Heterosexual HIV Epidemics: Patterns in the International Data. *PLoS ONE*, 7(3), e31227. doi: 10.1371/journal.pone.0031227
- Donoho, D. L., & Johnstone, J. M. (1994). Ideal Spatial Adaptation by Wavelet Shrinkage. *Biometrika*, 81(3), 425-455. doi: 10.1093/biomet/81.3.425
- International HIV/AIDS Alliance. (2012). The Global Fund to Fight AIDS, Tuberculosis and Malaria and Its Support for Middle Income Countries. Brighton: International HIV/AIDS Alliance.
- International HIV/AIDS Alliance. (2013). Community Action on Harm Reduction Retrieved 28 April, 2014, from <http://www.cahrproject.org/>
- Kimmons, S. (2013). Analysis: Southeast Asia Slowly Accepting Harm Redcution Retrieved 28 April, 2014, from <http://www.irinnews.org/report/98363/analysis-southeast-asia-slowly-accepting-harm-reduction>
- Ministry of Health. (2011). IBBS 2011: Integrated Biological and Behavioural Survey (D. G. o. D. C. a. E. Health, Trans.). Jakarta: Ministry of Health.
- Ministry of Health. (2013). Report on HIV-AIDS Cases up to 2nd Quarter 2013 (Center for Infectious Disease Control, Trans.). Jakarta: Ministry of Health.
- National AIDS Commission. (2012). Republic of Indonesia Country Report on the Follow-up to the Declaration of Commitment on HIV/AIDS (UNGASS), Reporting Period 2010-2011. Jakarta: National AIDS Commission.
- Rumah Cemara. (2011). Baseline Assessment for CAHR Project: Analysis Report. Bandung: Rumah Cemara.

*Rumah Cemara CAHR Implementation Strategy*. (2013). Short Report. Rumah Cemara.

StataCorp. (2013). *Stata Statistical Software: Release 13*. College Station: StataCorp LP.

Stoicescu, C., Cullen, L., Toska, E., Cook, C., & Abrickaja, L. (2012). Regional Update: Asia. In C. Stoicescu (Ed.), *The Global State of Harm Reduction: Towards an Integrated Response*. London: Harm Reduction International.

United Nations Office on Drugs and Crime. (2013). *World Drug Report 2013*. Vienna: United Nations Office on Drugs and Crime.

Weinhardt, L. S., Forsyth, A. D., Carey, M. P., Jaworski, B. C., & Durant, L. E. (1998). Reliability and validity of self-report measures of HIV-related sexual behavior: progress since 1990 and recommendations for research and practice. *Archives of Sexual Behavior*, 27(2), 155-180.

## Supplements. Tables and figures.

### 1. Socio-demographic characteristics

Table 6. Participants by sex

City	Sex – <i>n</i> (%)	
	Male	Female
Bandung	66 (96)	3 (4)
Bogor	107 (88)	14 (12)
Sukabumi	25 (96)	1 (4)

Figure 1. Sex distribution

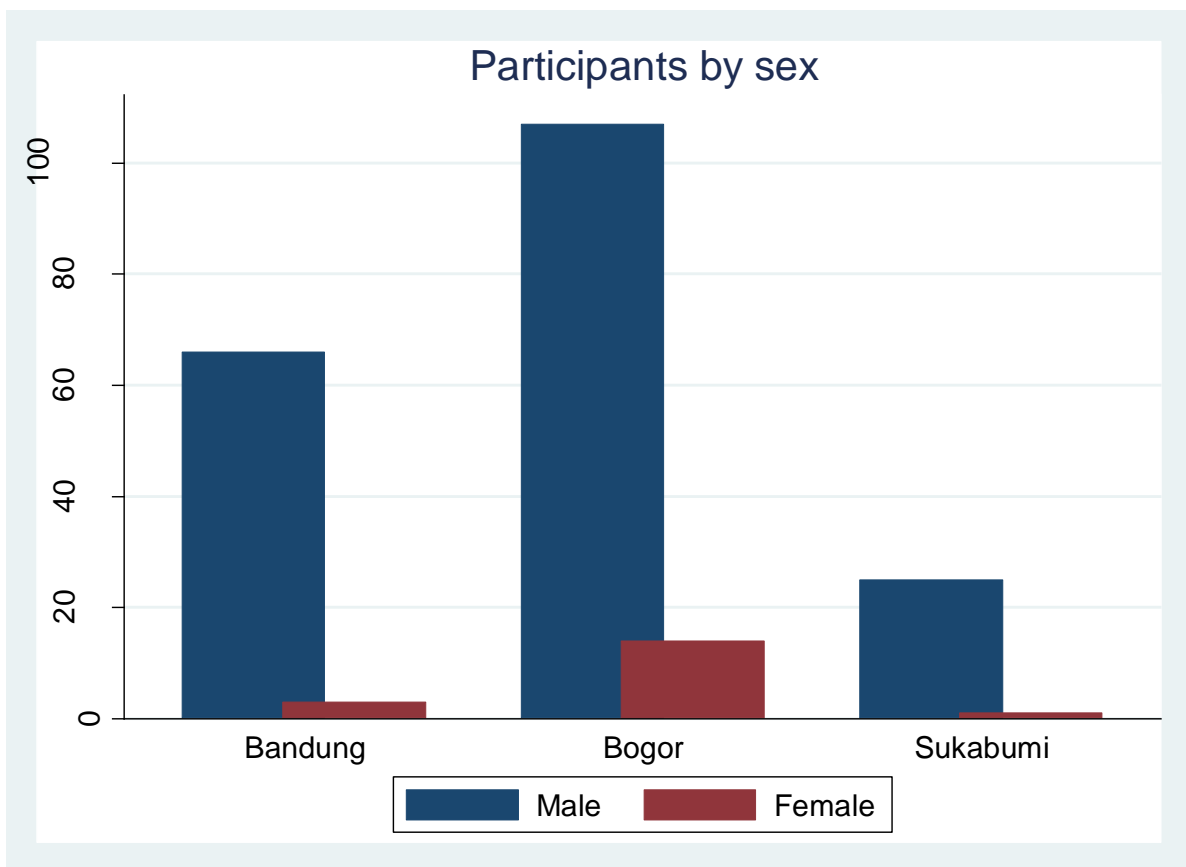


Table 7. Age of participants

City	Median age (IQR)
Bandung	35 (33–38)
Bogor	34 (31–37)
Sukabumi	34 (33–38)

Figure 2. Age distribution

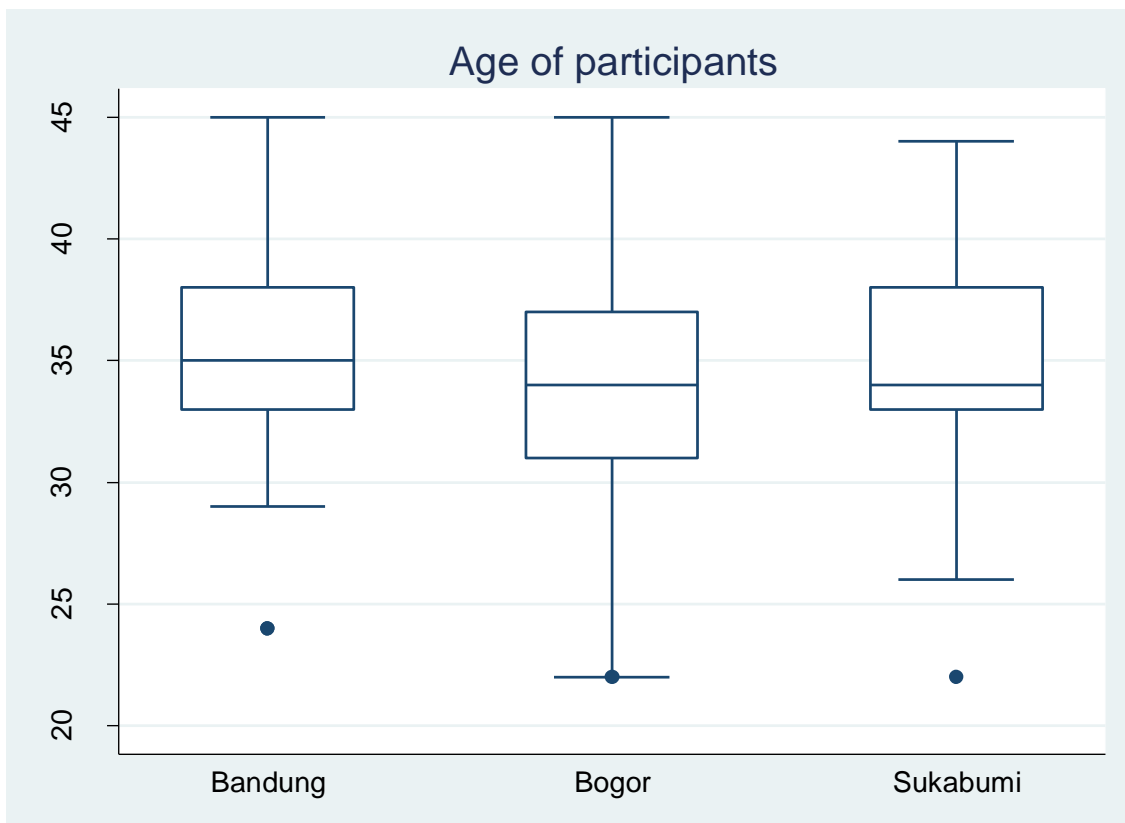


Table 8. Education level

City	No education	Primary	H. school (incomplete)	High school	College (incomplete)	College
Bandung	1 (1)	-	1 (1)	43 (62)	8 (12)	16 (23)
Bogor	-	1 (1)	5 (4)	76 (63)	17 (14)	22 (18)
Sukabumi	-	-	1 (4)	11 (42)	10 (38)	4 (15)

Figure 3. Education attainment of participants

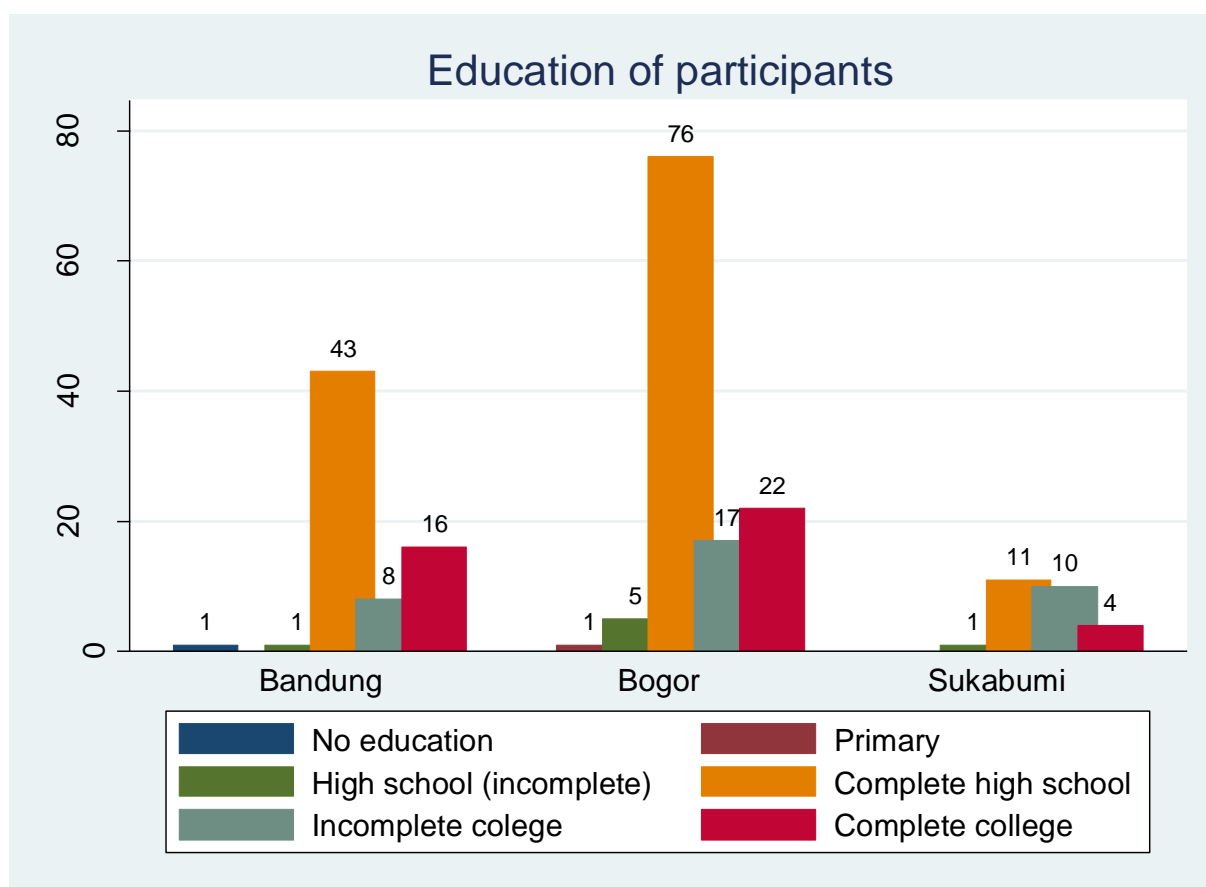


Table 9. Length of residency

City	Length of residency (years)					
	Since birth	>10	5-10	3-4	1-2	<1
Bandung	56 (81)	7 (10)	2 (3)	3 (4)	1 (1)	-
Bogor	41 (34)	38 (31)	12 (10)	7 (6)	7 (6)	16 (13)
Sukabumi	22 (85)	3 (12)	1 (4)	-	-	-

Figure 4. Length of residency

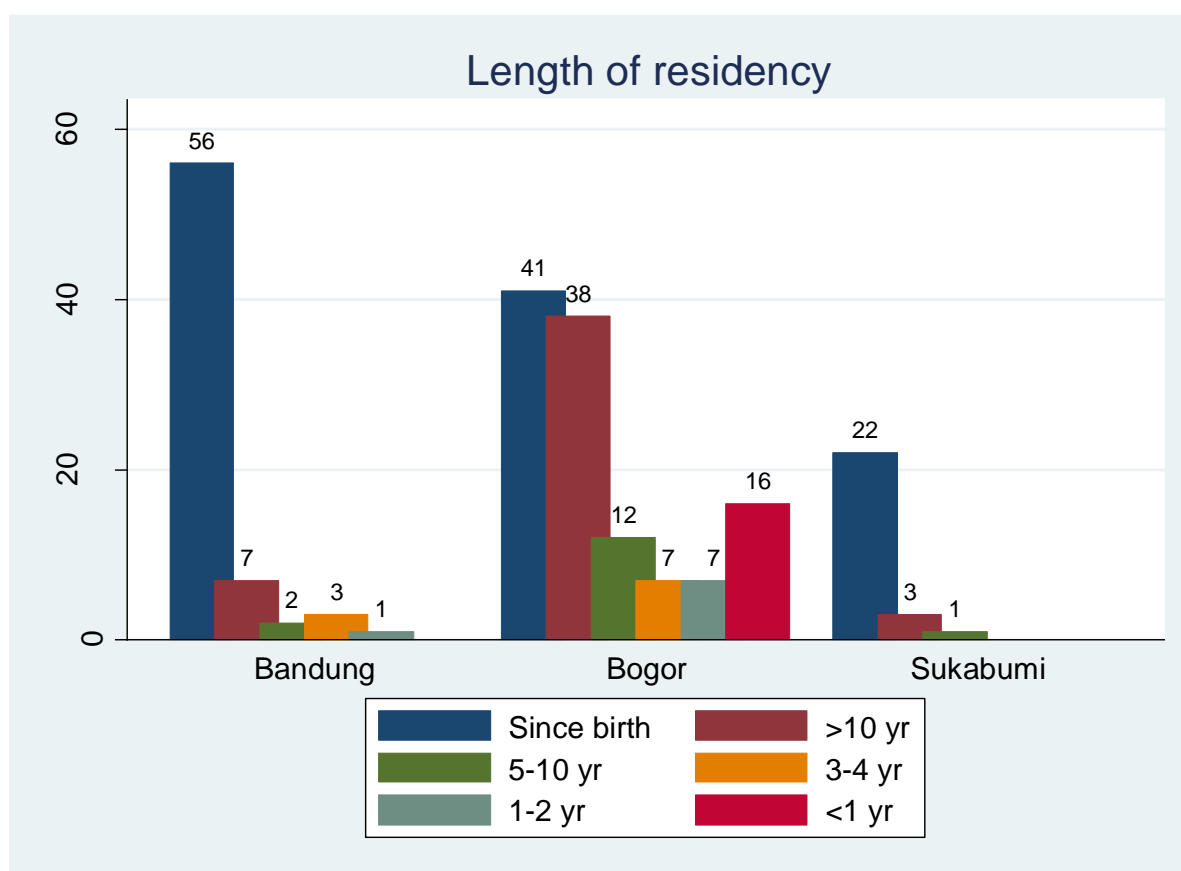




Table 10. Occupation of participants

City	Uni student	Employed	Occasional earnings	Unemployed	Housekeeper	Other
Bandung	2 (3)	49 (71)	6 (9)	5 (7)	2 (3)	5 (7)
Bogor	1 (1)	39 (33)	40 (33)	23 (19)	3 (3)	14 (12)
Sukabumi	-	8 (31)	4 (15)	1 (4)	-	13 (50)

Figure 5. Occupation of participants

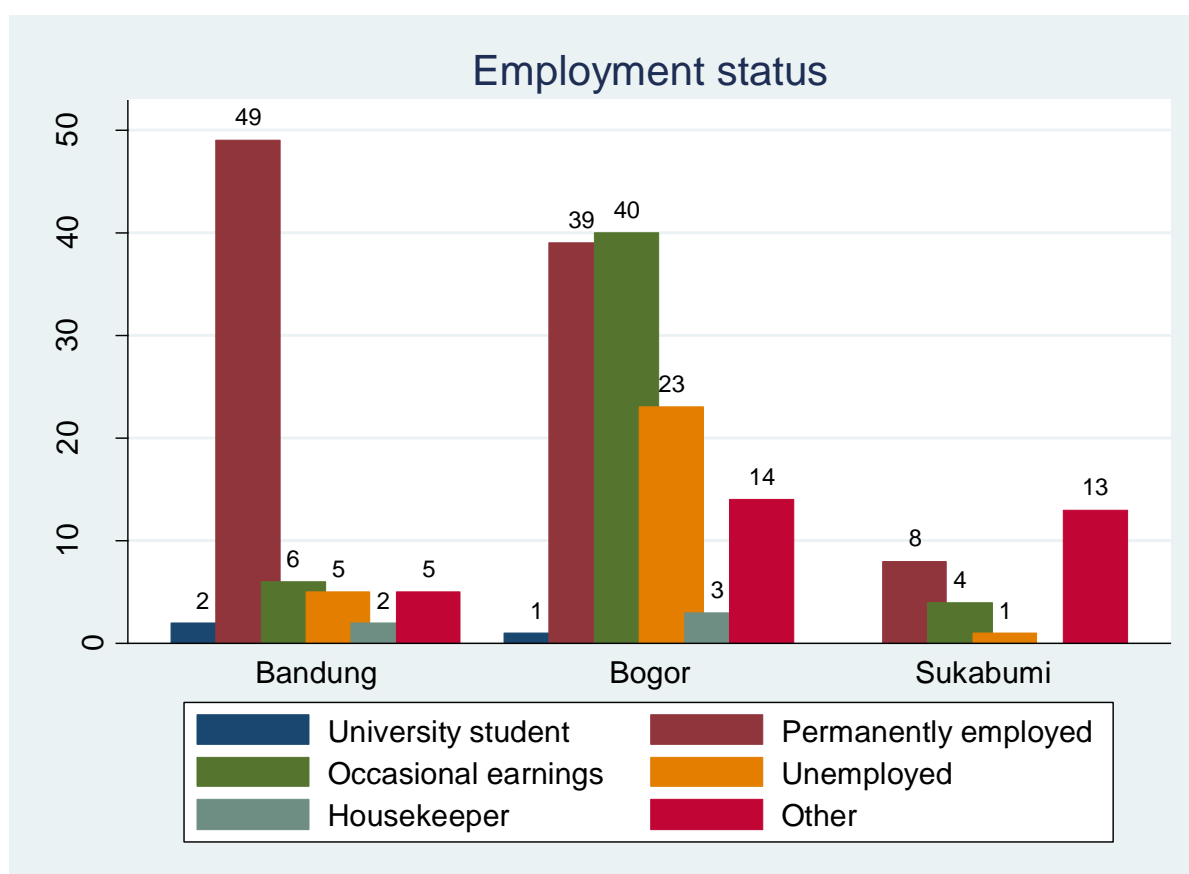


Table 11. Means of support

City	Salary	Business	Property income	State benefit	Family support	No means	Other
Bandung	44	29	3	-	49	-	3
Bogor	54	42	6	1	77	1	6
Sukabumi	11	15	-	-	12	-	-

Figure 6. Means of support

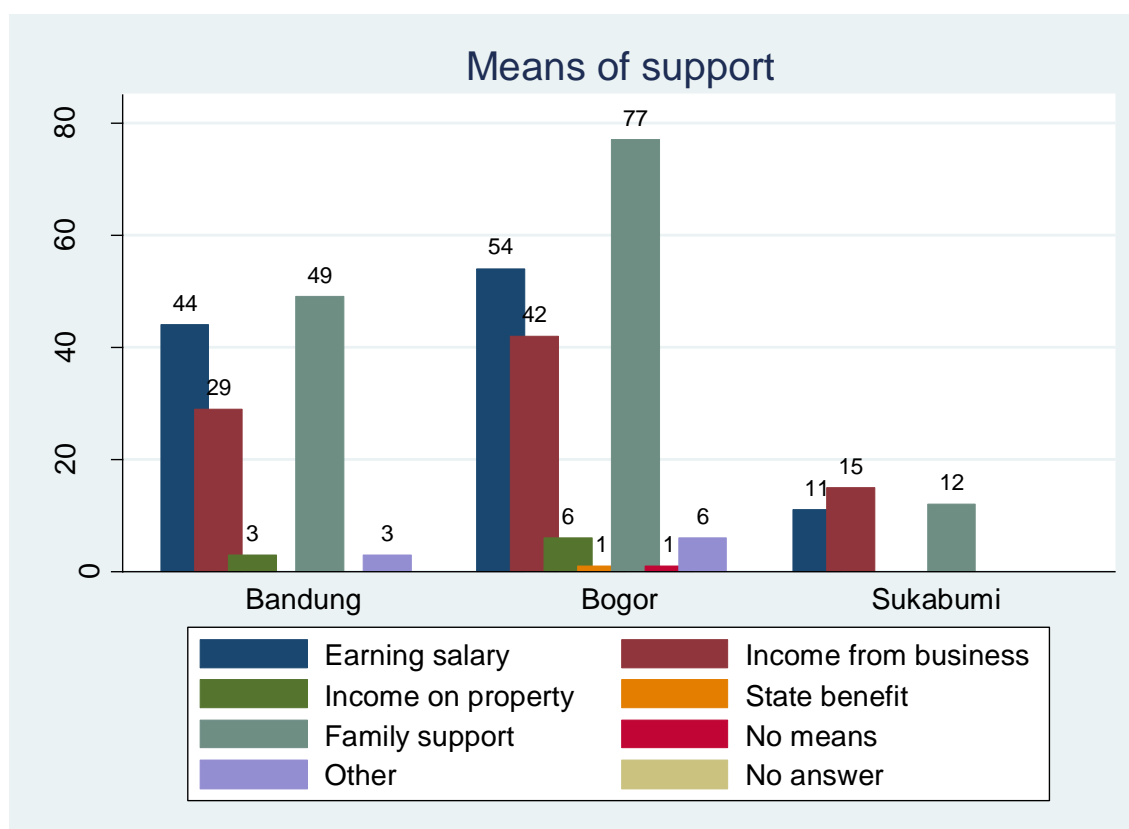


Table 12. Marital status

City	Married, no other partner	Married, with other partner	Occasional partner	No partner
Bandung	41 (59)	3 (4)	15 (22)	10 (14)
Bogor	61 (50)	14 (12)	24 (20)	22 (18)
Sukabumi	19 (73)	2 (8)	1 (4)	4 (15)

Figure 7. Marital status

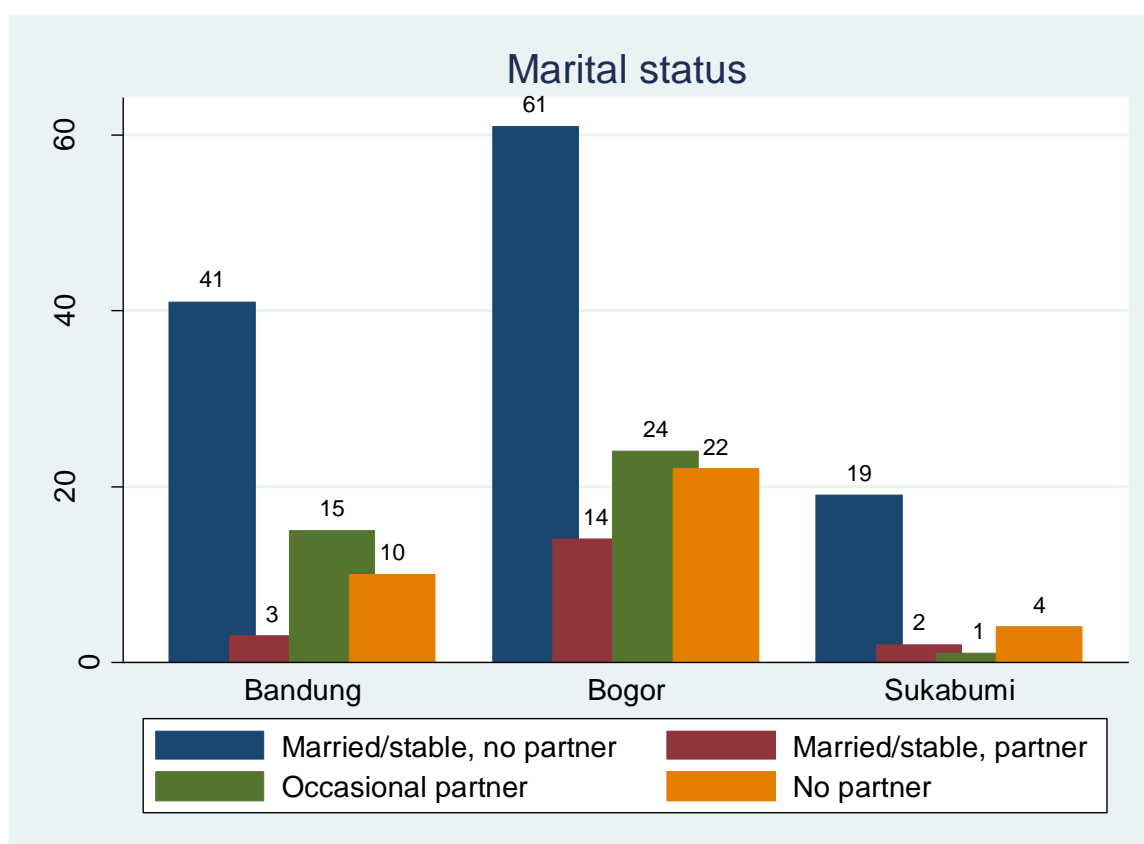


Table 13. Live alone or with others

City	Yes	No
Bandung	7 (10)	62 (90)
Bogor	5 (4)	114 (96)
Sukabumi	1 (4)	25 (96)

Figure 8. Live alone or with others

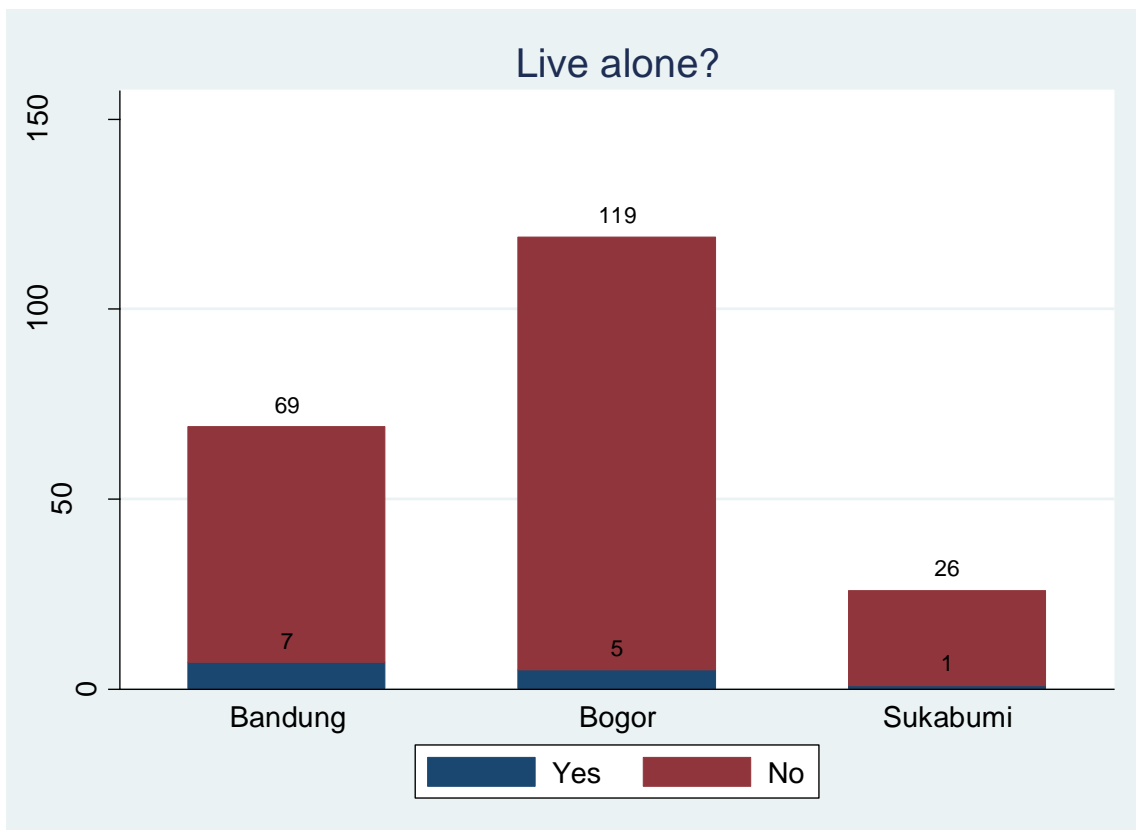


Table 14. Living arrangement

City	Permanent partner	Parents	Children	Friends	Other
Bandung	38	40	49	64	67
Bogor	63	55	84	117	115
Sukabumi	6	17	17	26	26

Figure 9. Living arrangement

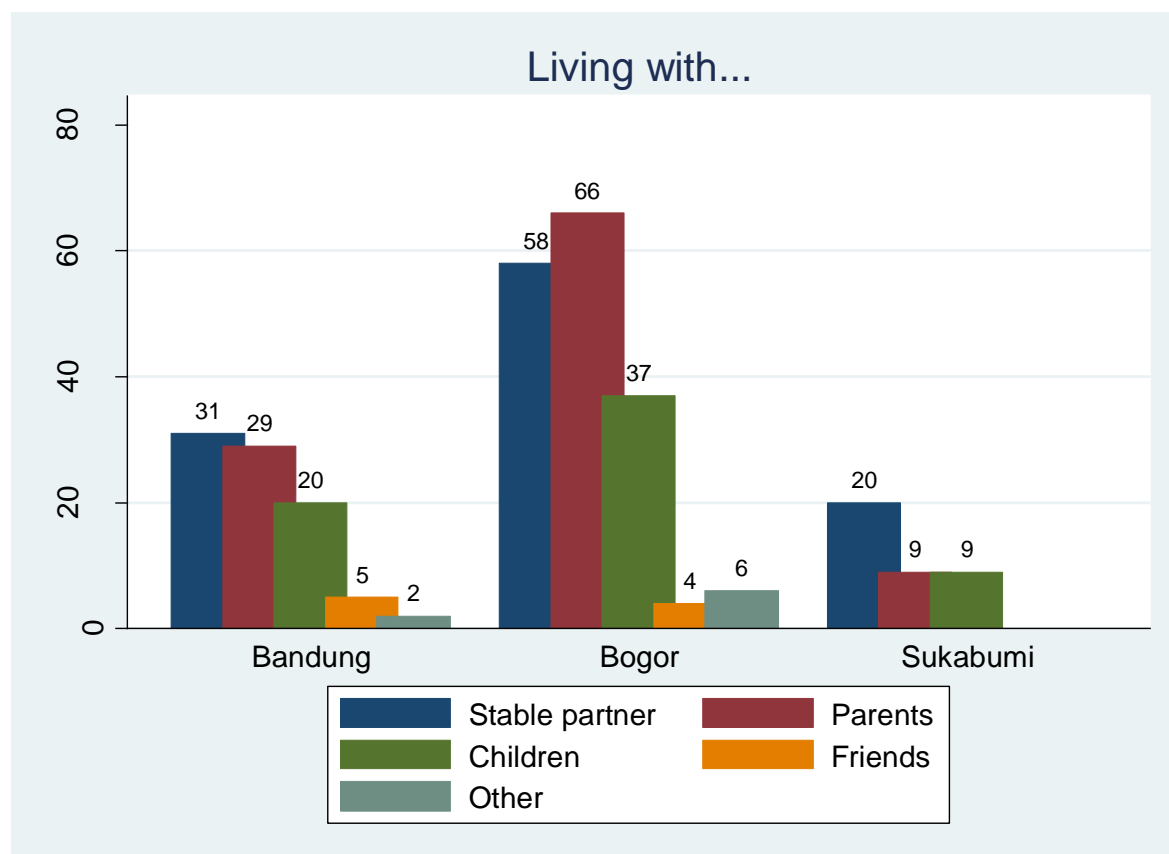


Table 15. PWID partner

City	Yes	No	No answer
Bandung	4 (13)	26 (84)	1 (3)
Bogor	10 (17)	47 (81)	1 (2)
Sukabumi	1 (5)	19 (95)	-

Figure 10. PWID partner

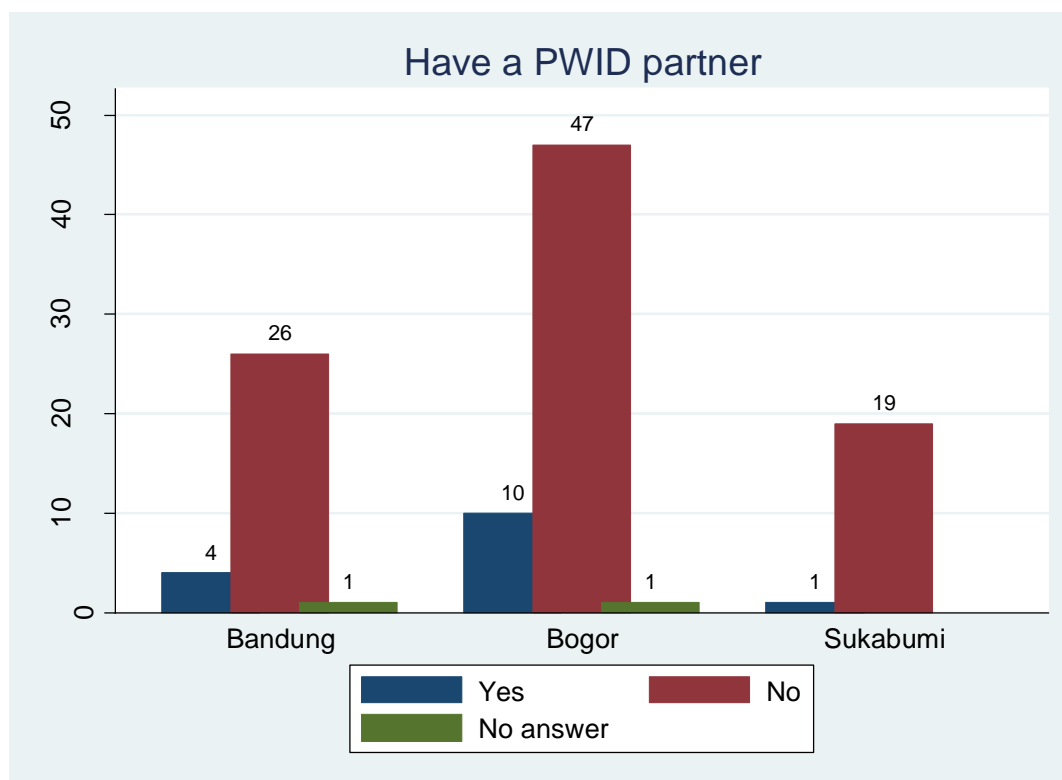
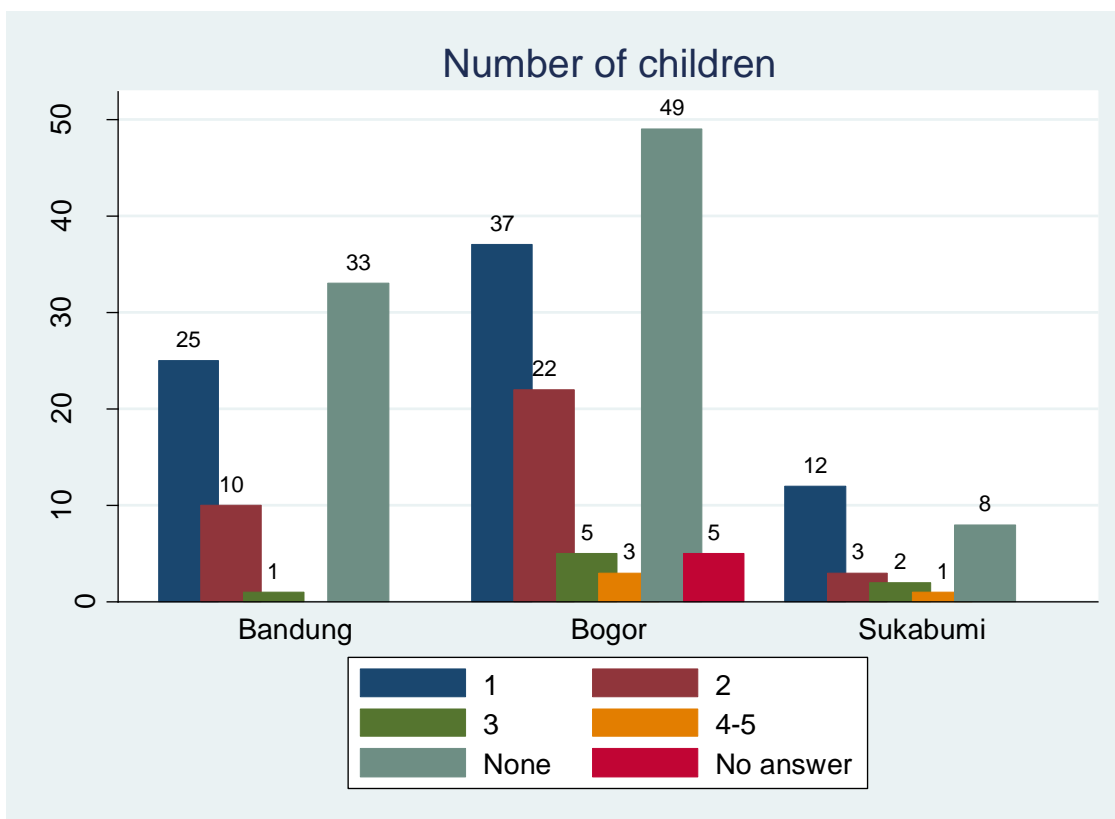


Table 16. Number of children

City	Number of children					
	1	2	3	4-5	None	No answer
Bandung	25 (36)	10 (14)	1 (1)	-	33 (48)	-
Bogor	37 (31)	22 (18)	5 (4)	3 (2)	49 (41)	5 (4)
Sukabumi	12 (46)	3 (12)	2 (8)	1 (4)	8 (31)	-

Figure 11. Number of children



## 2. Injecting behaviours

Table 17. Age of onset of injection

City	Median age (IQR)
Bandung	19 (17–22)
Bogor	18 (17–20)
Sukabumi	19 (17–20)

Figure 12. Age of onset of injection

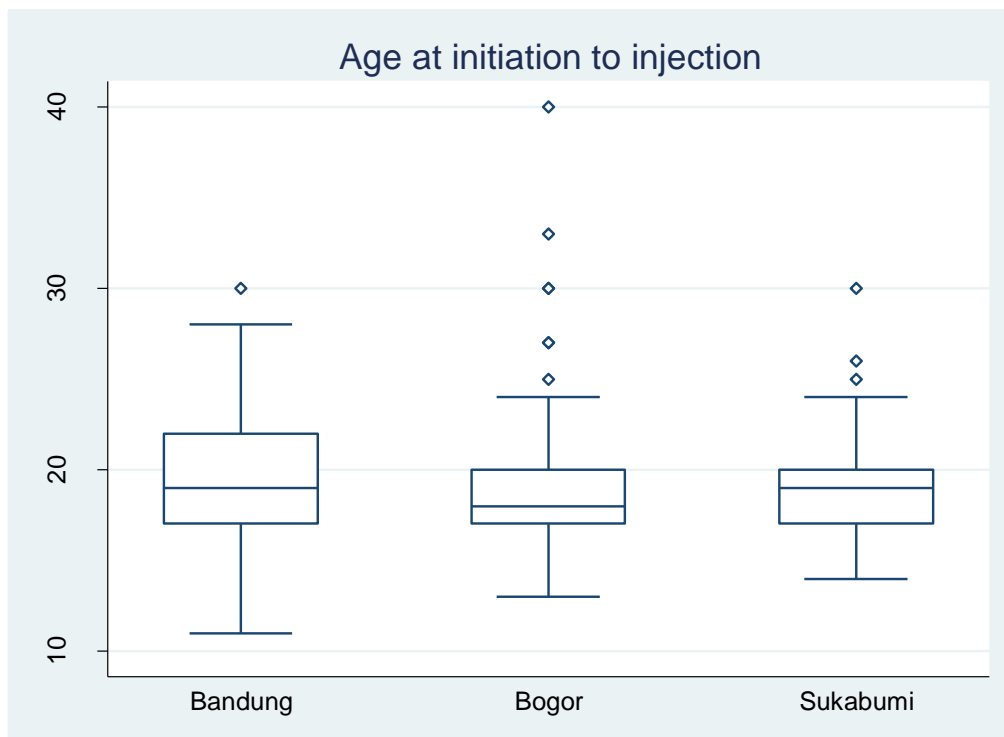




Table 18. Frequency of injection in past month

City	Frequency of injection							
	Once	2-3x	Once per week	2-3x per week	4-6x per week	Once a day	>1x per day	No in past month
Bandung	9 (13)	16 (23)	6 (8)	18 (25)	5 (7)	14 (20)	3 (4)	-
Bogor	9 (8)	28 (23)	19 (16)	14 (12)	13 (11)	18 (15)	16 (13)	3 (3)
Sukabumi	-	5 (20)	3 (12)	-	6 (24)	11 (44)	-	-

Figure 13. Frequency of injection

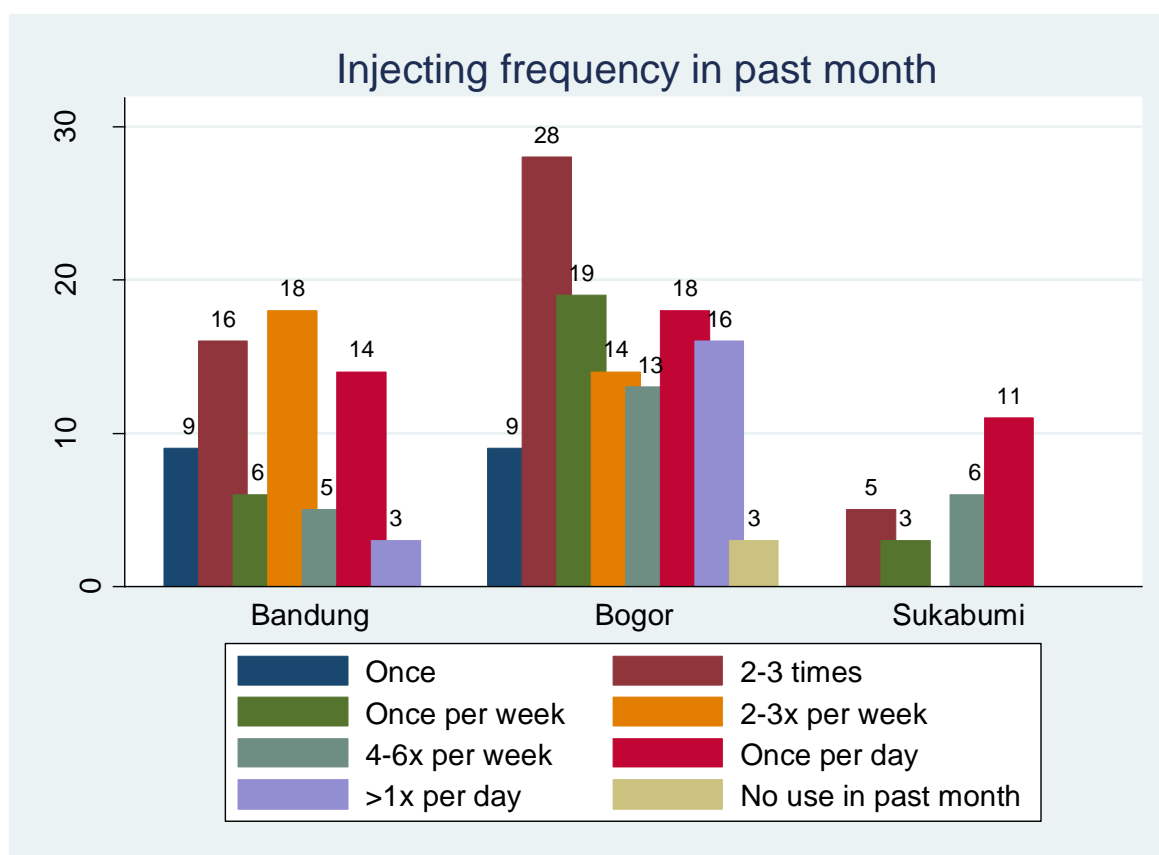


Table 19. Daily injection frequency

City	Frequency of injection per day			
	Once	2-3x	>4 times	No answer
Bandung	49 (72)	17 (25)	2 (3)	-
Bogor	60 (50)	50 (42)	9 (8)	1 (1)
Sukabumi	20 (80)	2 (8)	3 (12)	-

Figure 14. Daily injecting frequency

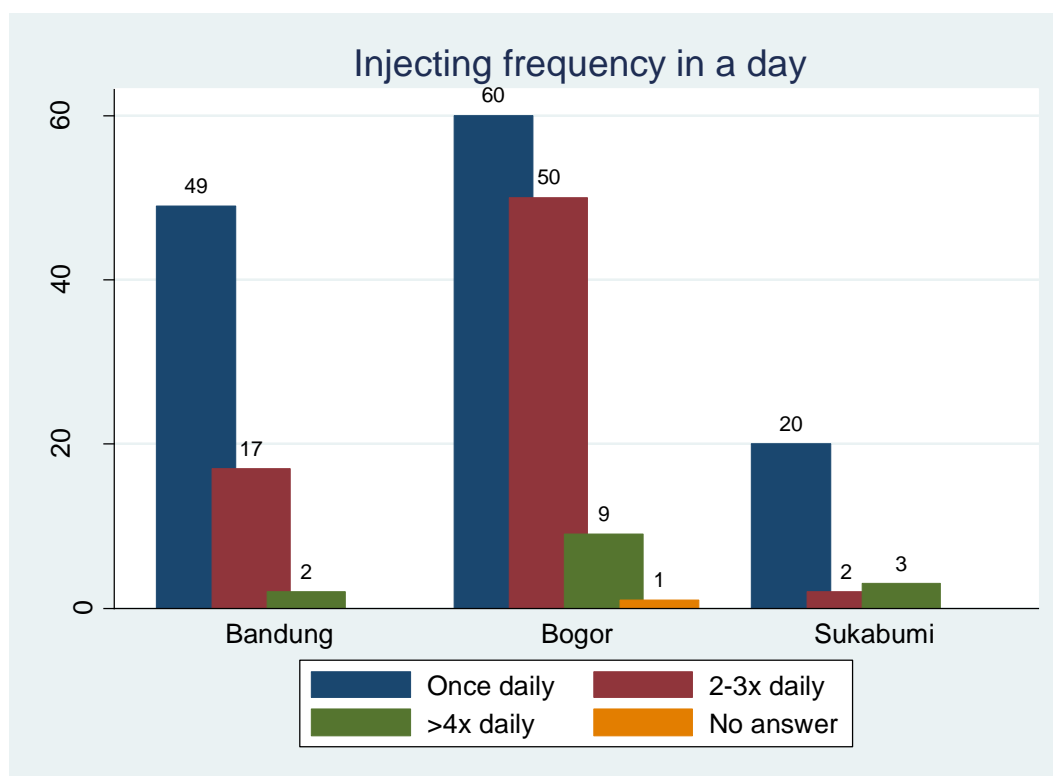


Table 20. Main drug injected

Drug type	City		
	Bandung	Bogor	Sukabumi
Heroin/brown sugar	69	121	26
Liquid opium extract	-	-	-
Pharmaceutical opiates	-	-	-
Buprenorphine	17	2	-
Methadone	3	-	-
Quidict	-	-	-
Other opiate	-	3	-
Amphetamine	5	-	-
Methamphetamine	-	-	-
Ecstasy	-	-	-
Other stimulant	-	-	-
Benzodiazepine	6	-	-
Ketamine	-	-	-
Calmpose	-	-	-
Diazepam	3	1	-
Other sedative	-	-	-

Figure 15. Main drug injected

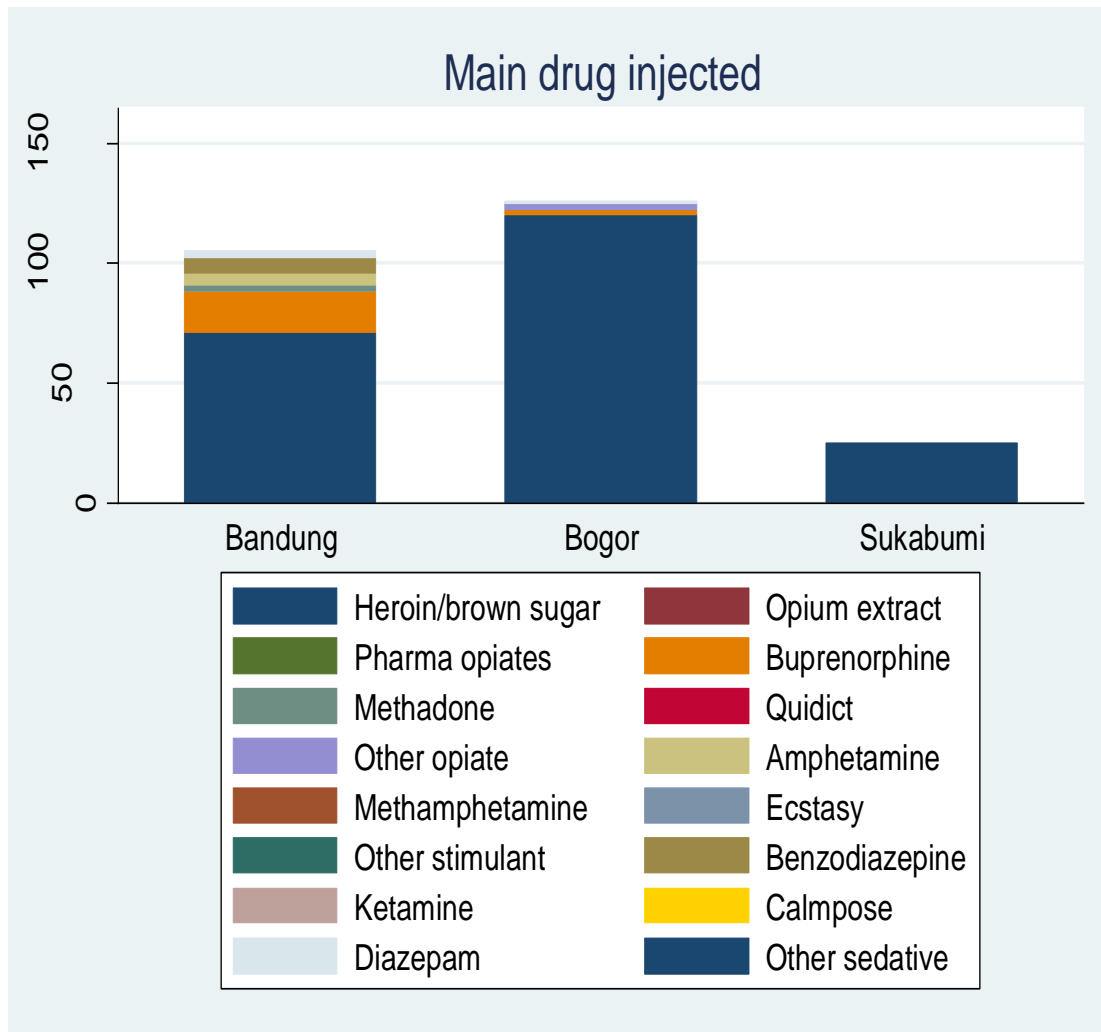


Table 21. Participation in OST

City	Yes	No	No answer
Bandung	22 (31)	45 (66)	2 (3)
Bogor	30 (24)	91 (76)	-
Sukabumi	9 (32)	17 (68)	-

Figure 16. Participation in OST

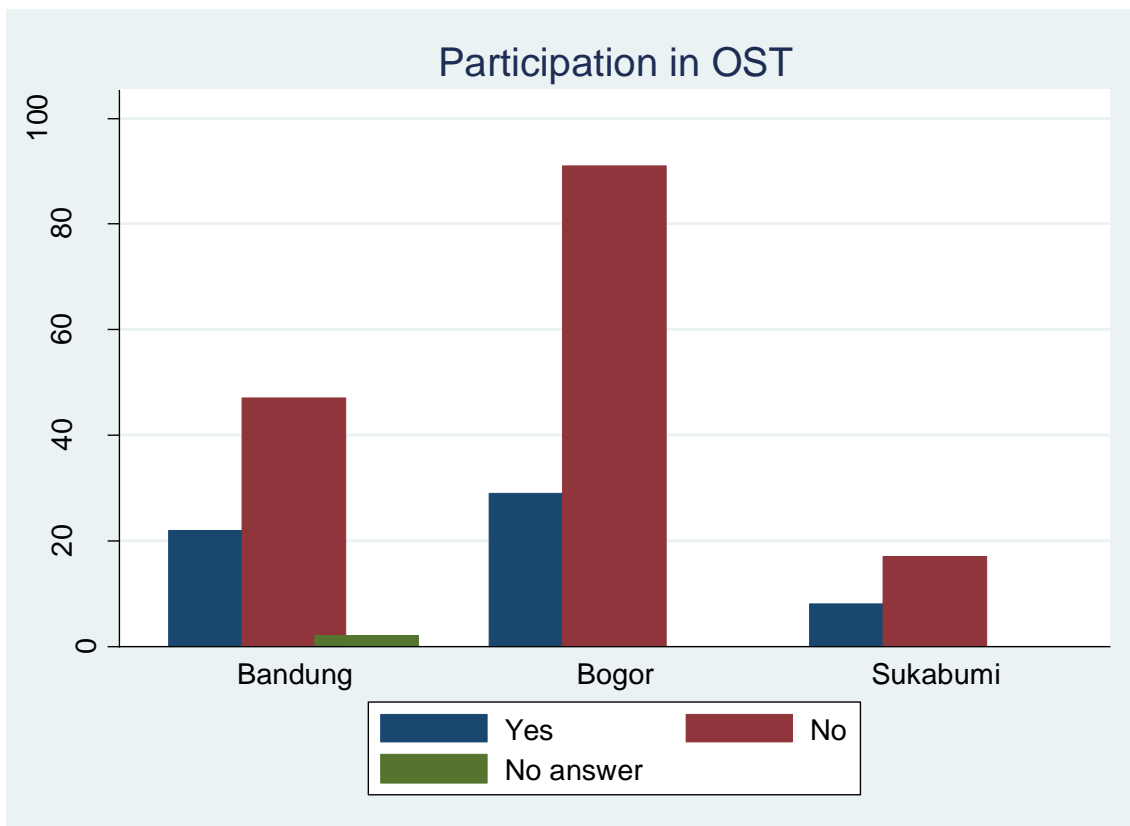


Table 22. Past overdose

City	Yes	No	No answer
Bandung	5 (7)	57 (83)	7 (10)
Bogor	11 (9)	109 (91)	-
Sukabumi	12 (24)	14 (56)	

Figure 17. Past overdose experience

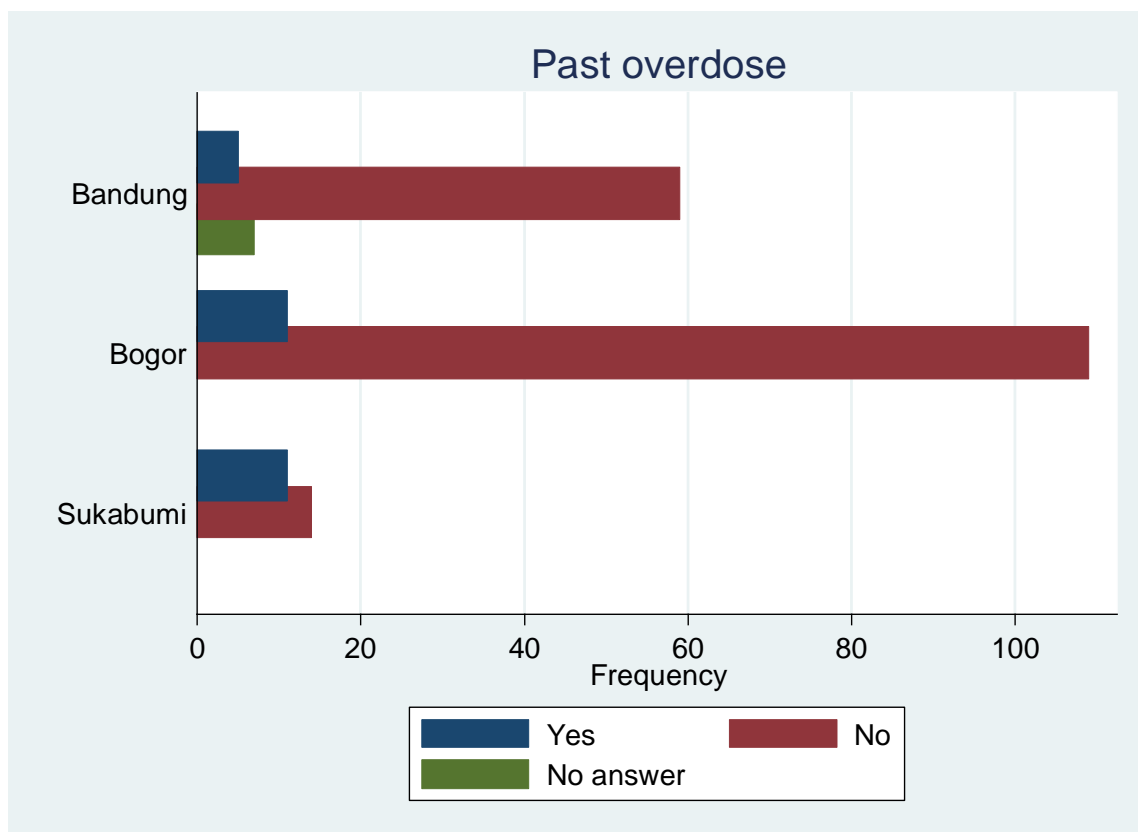


Table 23. Ever reversed by naloxone

City	Yes	No	No answer
Bandung	2 (7)	60 (87)	7 (10)
Bogor	-	121 (100)	-
Sukabumi	2 (8)	24 (92)	-

Figure 18. Ever reversed using naloxone

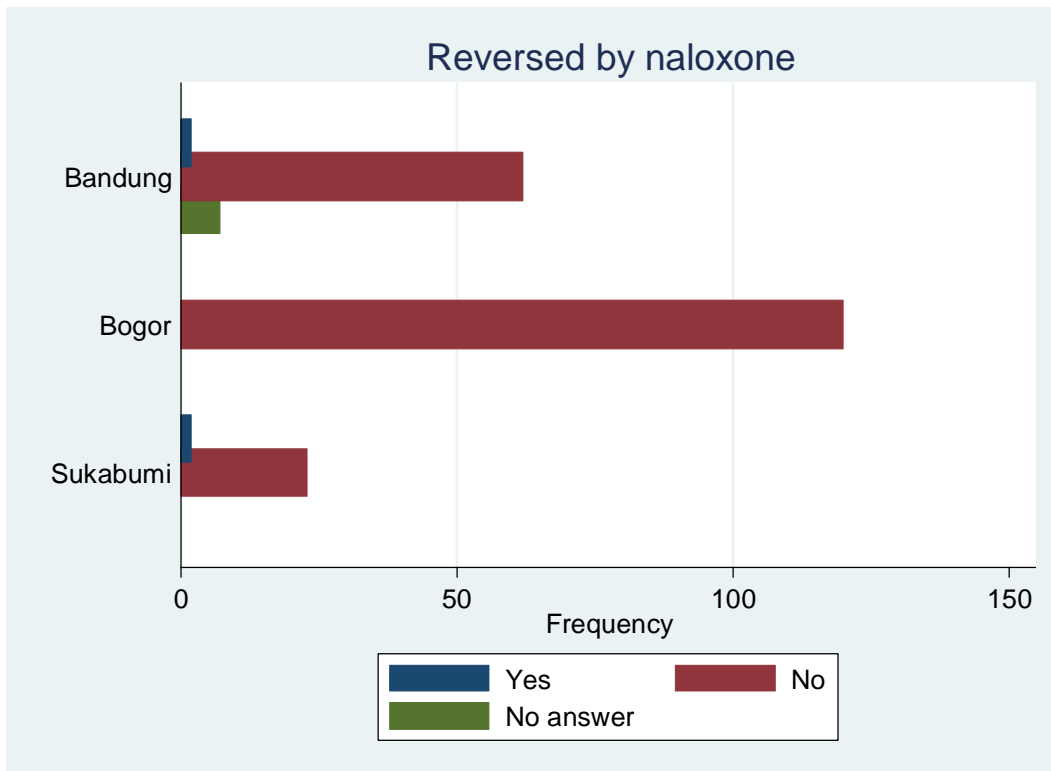


Table 24. Ever administer naloxone

City	Yes	No	No answer
Bandung	1 (1)	62 (90)	6 (9)
Bogor	1 (1)	120 (99)	-
Sukabumi	-	26	-

Figure 19. Administer naloxone to other

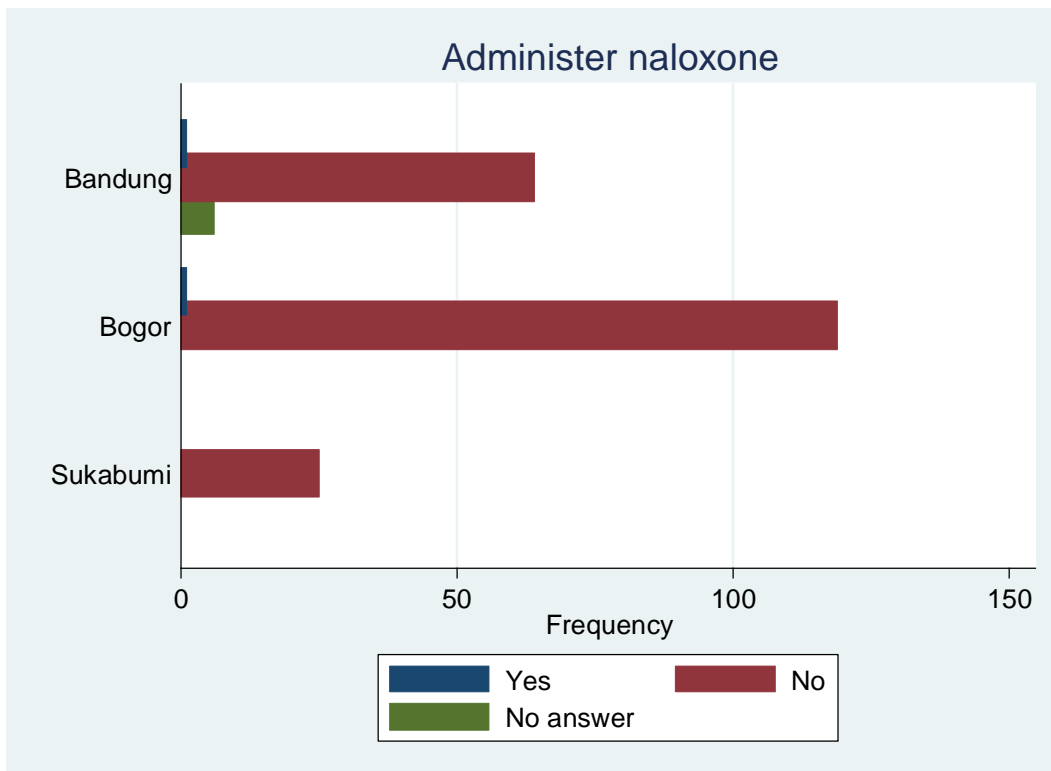




Table 25. Blood-filling practice

City	Yes	No
Bandung	57 (83)	12 (17)
Bogor	121 (100)	-
Sukabumi	24 (92)	2 (8)

Figure 20. Blood-filling practice

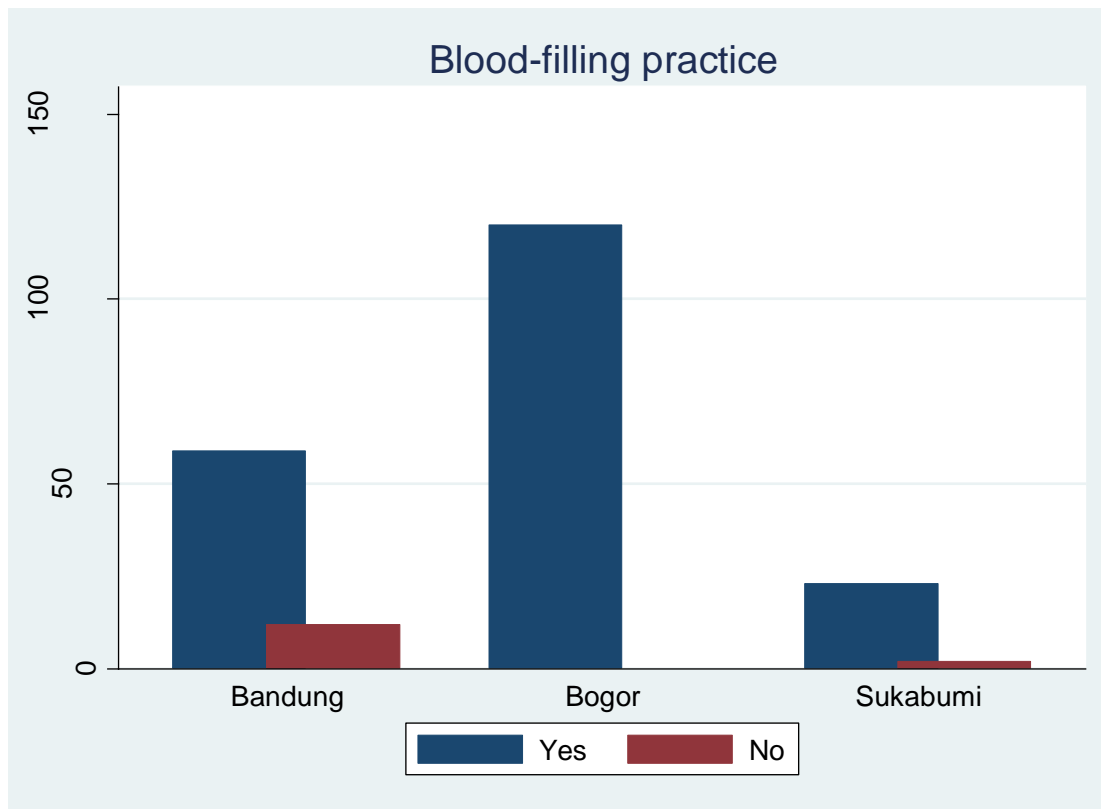


Table 26. Ever injected by other

City	Yes	No
Bandung	26 (35)	47 (65)
Bogor	65 (54)	56 (46)
Sukabumi	17 (68)	9 (32)

Figure 21. Ever injected by other

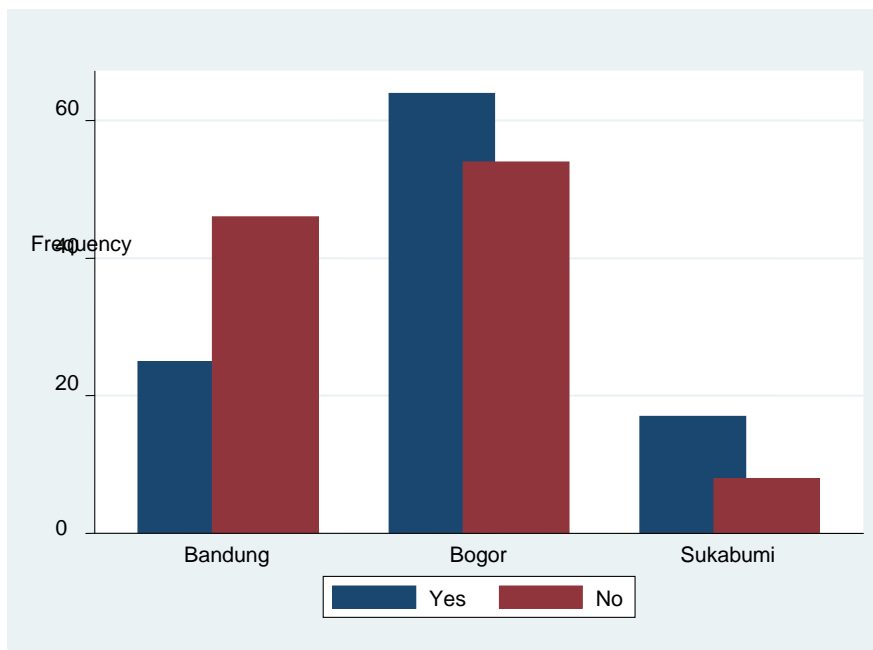


Table 27. Using clean needle at last injection

City	Yes	No
Bandung	60 (87)	9 (13)
Bogor	115 (95)	7 (5)
Sukabumi	25 (96)	1 (4)

Figure 22. Using clean needle at last injection

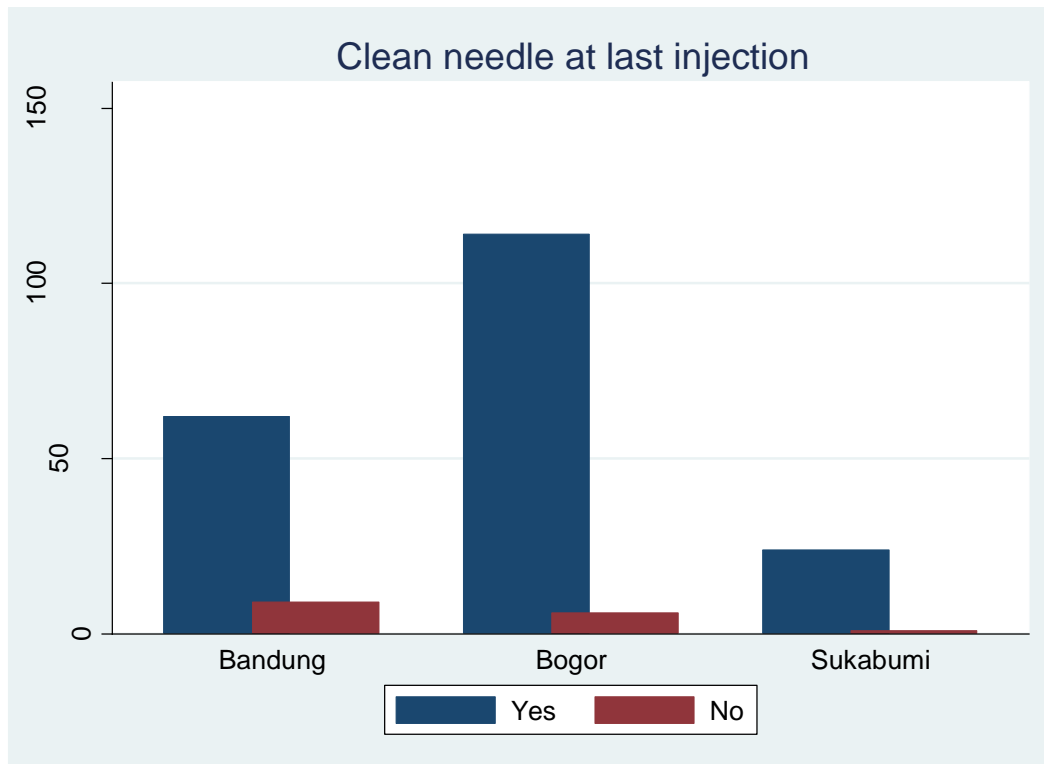


Table 28. Using used needle in 30 days

City	Yes	No
Bandung	24 (35)	45 (65)
Bogor	25 (21)	96 (79)
Sukabumi	2 (8)	24 (92)

Figure 23. Using used needle in 30 days

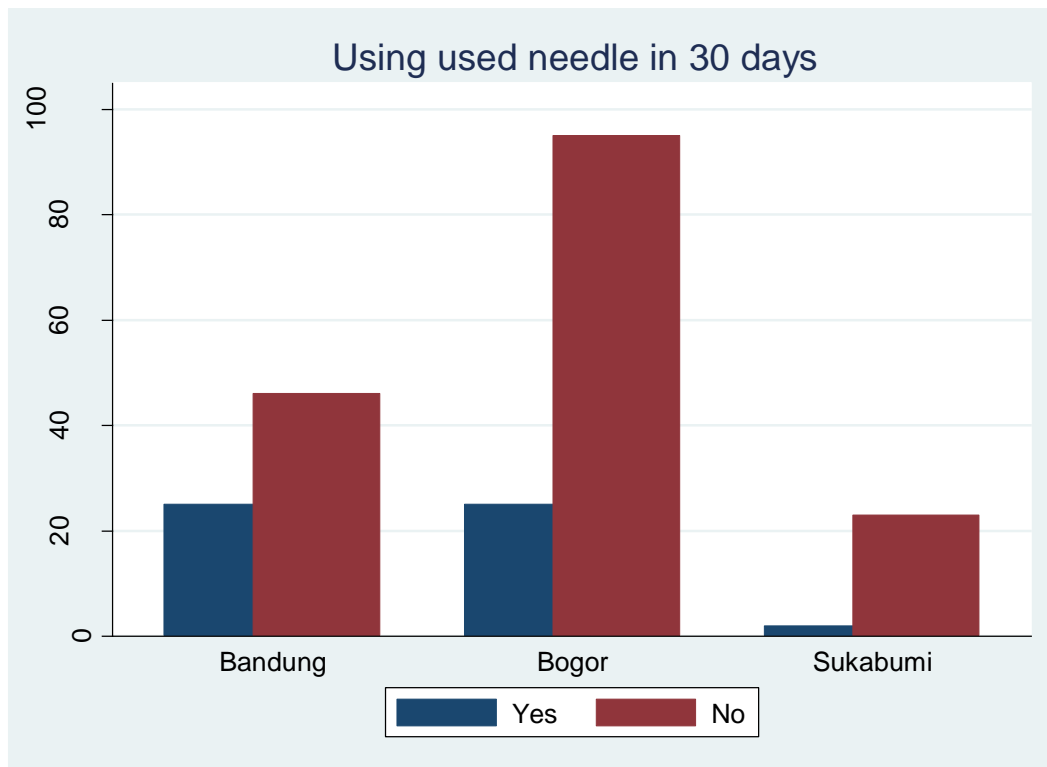


Table 29. Using used needle in 30 days (confirmation)

City	Yes	No, definitely
Bandung	-	45 (100)
Bogor	2 (2)	94 (98)
Sukabumi	1 (4)	23 (96)

Figure 24. Using used needle in 30 days (confirmation)

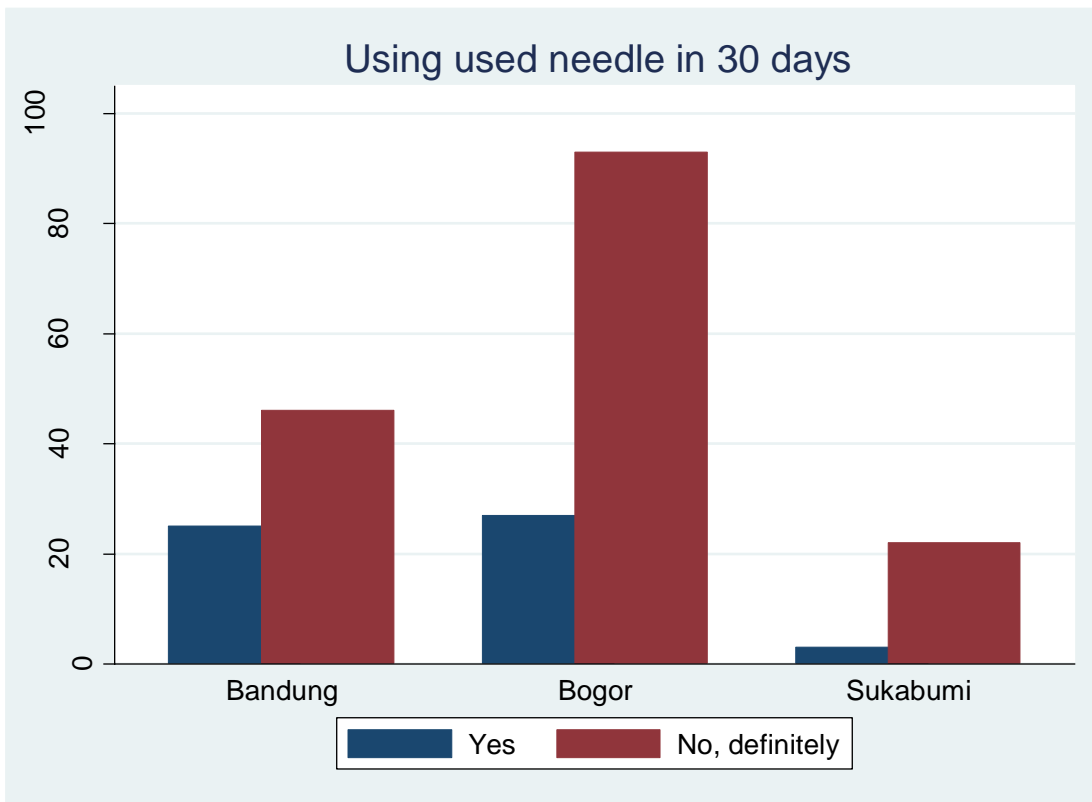


Table 30. Reason for not using clean needle

City	Not available	From someone I trust	Other	No answer
Bandung	18 (72)	3 (12)	3 (12)	1 (4)
Bogor	20 (80)	-	5 (20)	-
Sukabumi	-	2 (100)	-	-

Figure 25. Reason for not using clean needle

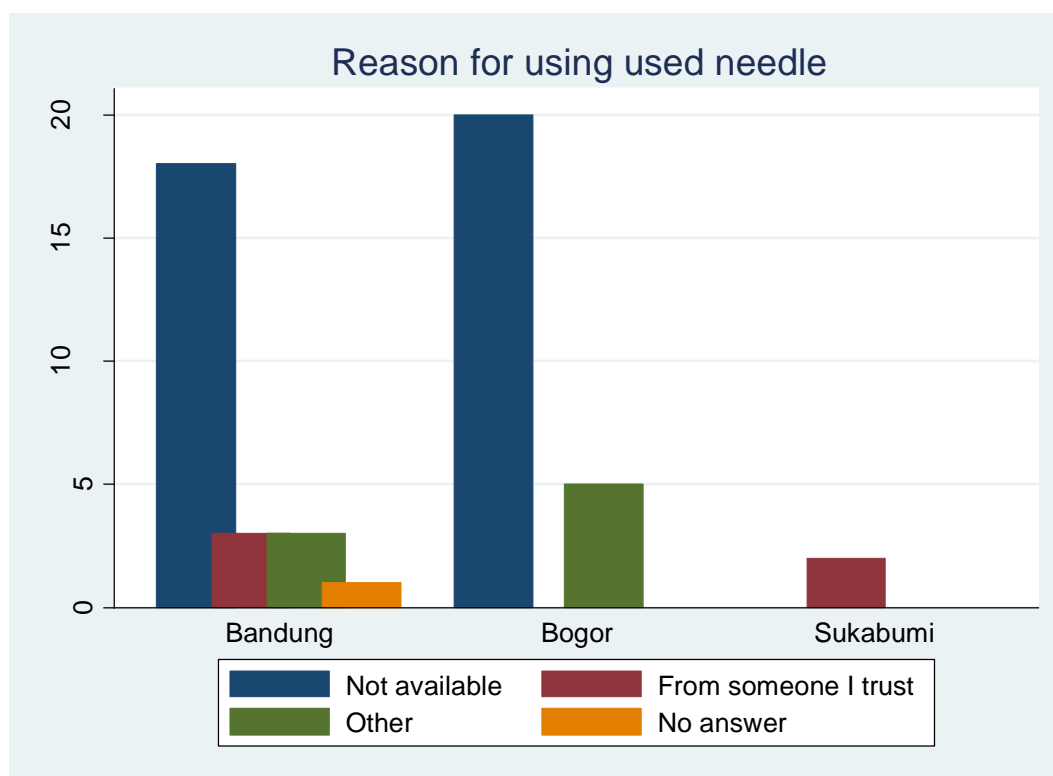


Table 31. Frequency of bleaching

City	Always	In majority cases	Sometimes	Rarely	Never	No answer
Bandung	6 (24)	3 (12)	8 (32)	3 (12)	4 (16)	1 (4)
Bogor	4 (16)	1 (4)	8 (32)	4 (16)	8 (32)	-
Sukabumi	1 (50)	1 (50)	-	-	-	-

Figure 26. Bleaching frequency

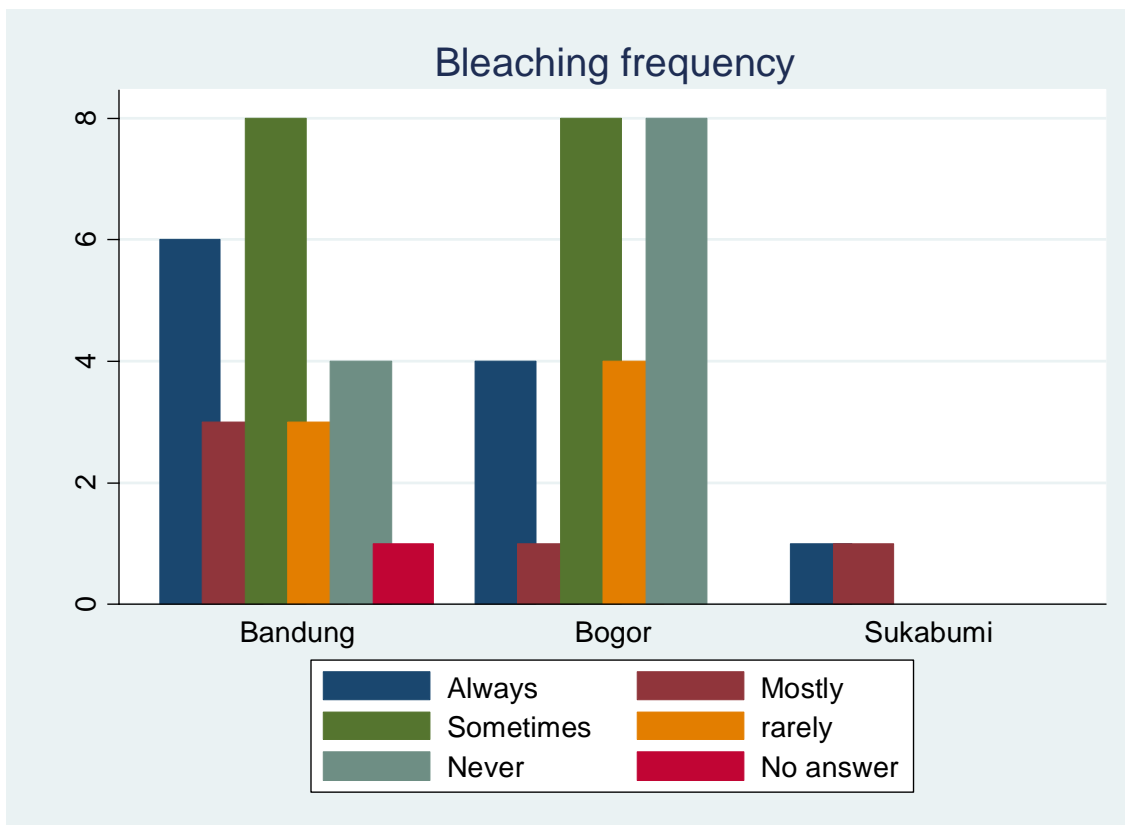


Table 32. Bleaching frequency (confirmation)

City	Yes	No, definitely
Bandung	1 (17)	5 (83)
Bogor	1 (25)	3 (75)
Sukabumi	-	1 (100)

Figure 27. Bleaching frequency (confirmation)

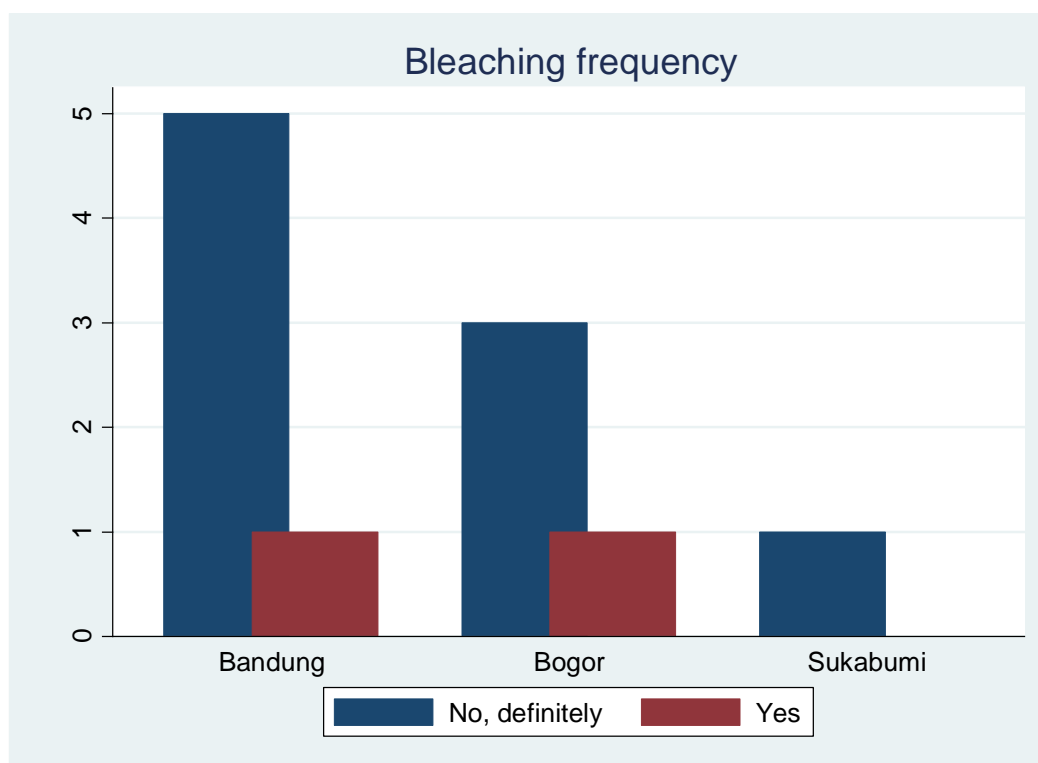




Table 33. Frequency of lending needles

City	In majority cases	Sometimes	Rarely	Never
Bandung	1 (1)	2 (3)	3 (4)	64 (92)
Bogor	1 (1)	6 (5)	10 (8)	103 (87)
Sukabumi	-	1 (4)	-	25 (96)

Figure 28. Needle lending

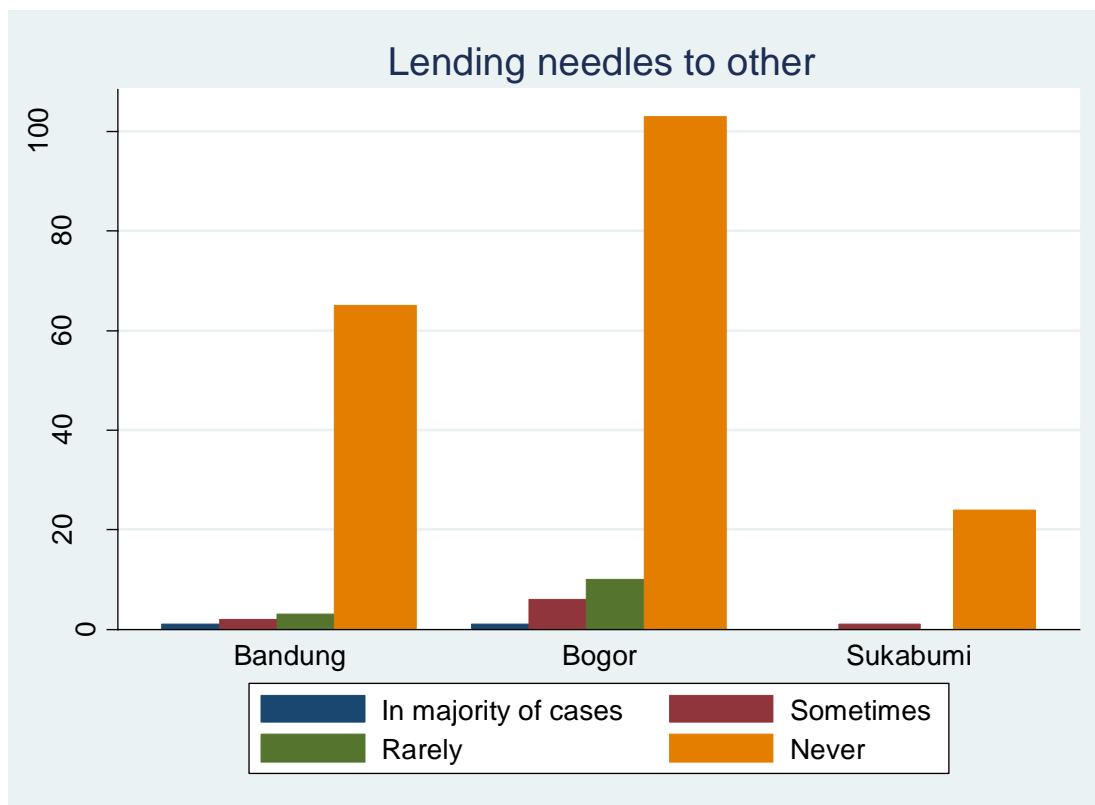


Table 34. Frequency of lending needles (confirmation)

City	Yes	No, definitely
Bandung	1 (2)	63 (98)
Bogor	1 (1)	103 (99)
Sukabumi	-	25 (100)

Figure 29. Needle lending frequency (confirmation)

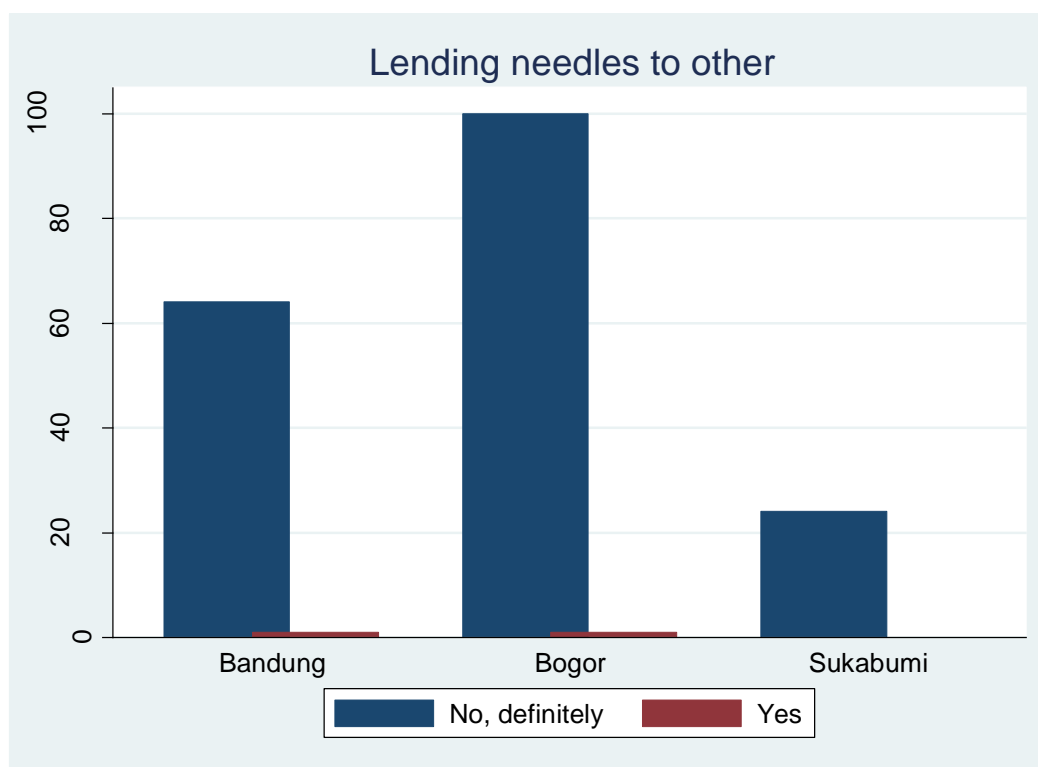


Table 35. Ever inject pre-filled

City	Yes	No	No answer
Bandung	15 (21)	54 (79)	-
Bogor	26 (21)	94 (78)	1 (1)
Sukabumi	10 (40)	16 (60)	-

Figure 30. Use of pre-filled injection

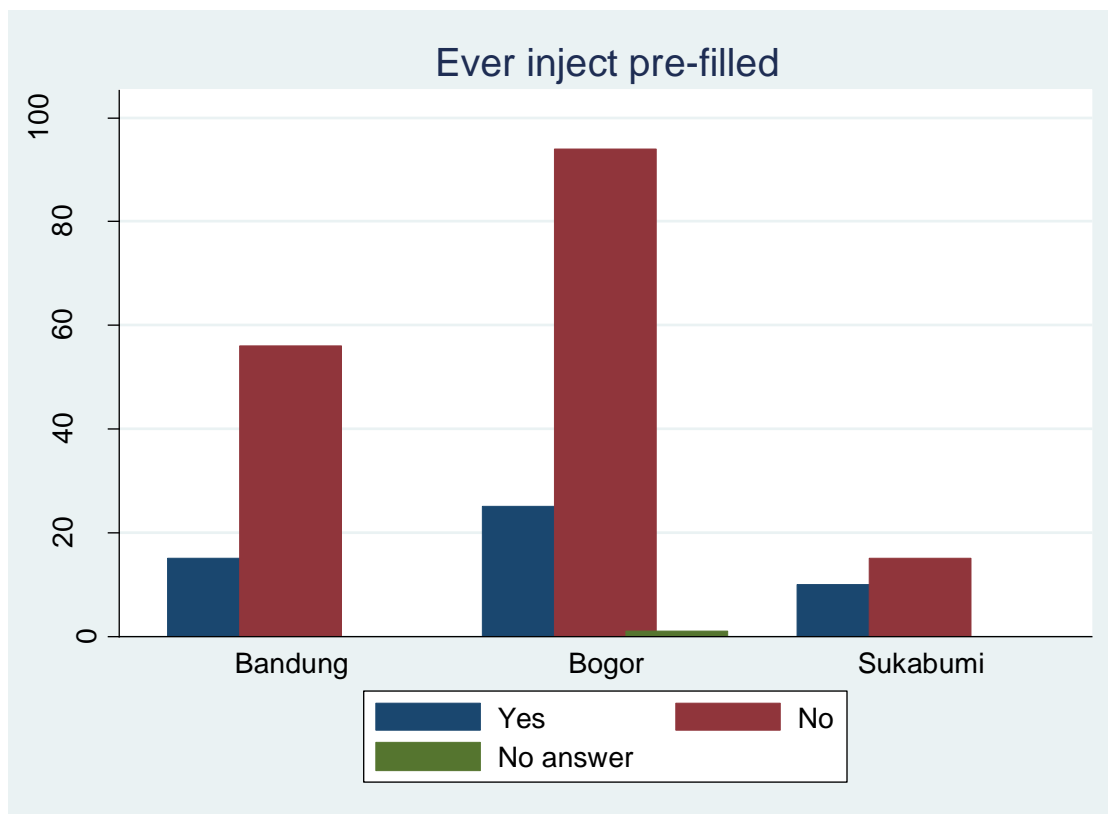


Table 36. Frequency using pre-filled

City	Median (IQR)
Bandung	2 (1–3)
Bogor	2 (1–4)
Sukabumi	2 (1–2)

Figure 31. Frequency using prefilled injection

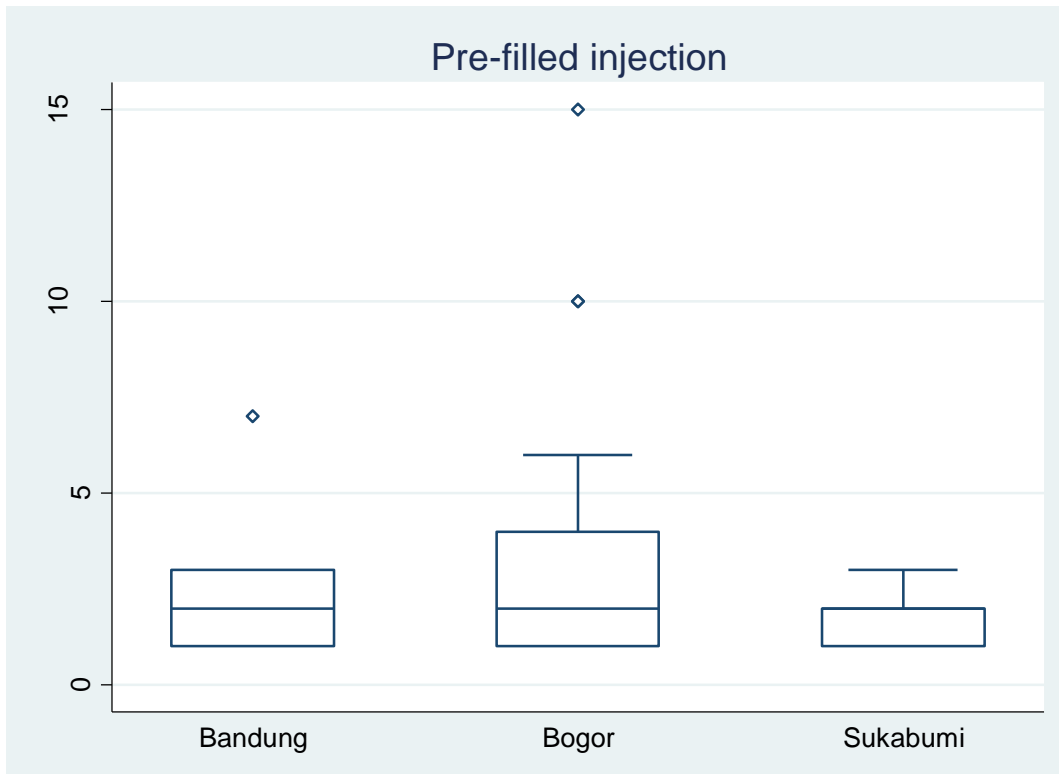


Table 37. Frequency of sharing spoon/cup/cooker

City	Always	In majority cases	In half cases	Sometimes	Rarely	Never	No answer
Bandung	-	2 (3)	1 (1)	19 (28)	20 (28)	26 (38)	1 (1)
Bogor	3(2)	8 (7)	2 (2)	19 (16)	6 (5)	83 (69)	-
Sukabumi	-	10 (36)	-	15 (60)	1 (4)	-	-

Figure 32. Frequency of sharing spoon/cup/cooker

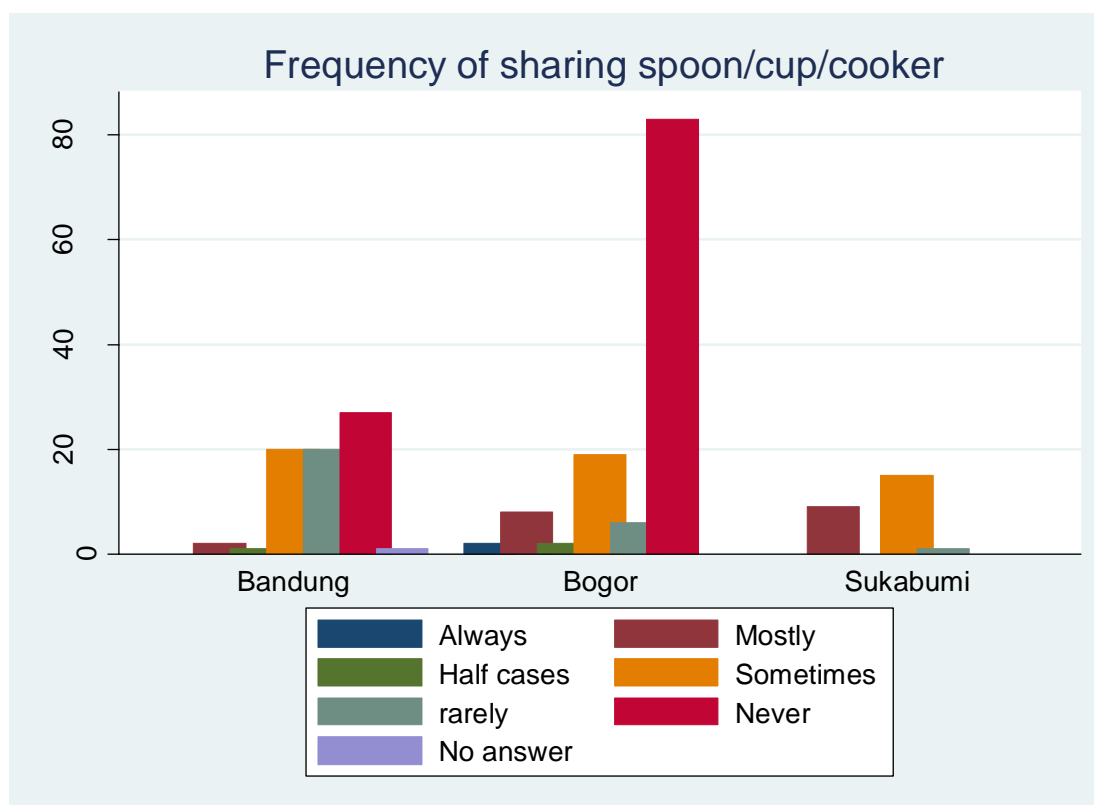


Table 38. Frequency of sharing filter

City	Always	In majority cases	In half cases	Sometimes	Rarely	Never	No answer
Bandung	1 (1)	2 (3)	-	5 (7)	7 (10)	54 (79)	-
Bogor	1 (1)	2 (2)	-	5 (4)	2 (2)	111 (92)	-
Sukabumi	-	11 (40)	-	14 (56)	1 (4)	-	-

Figure 33. Frequency of sharing filter

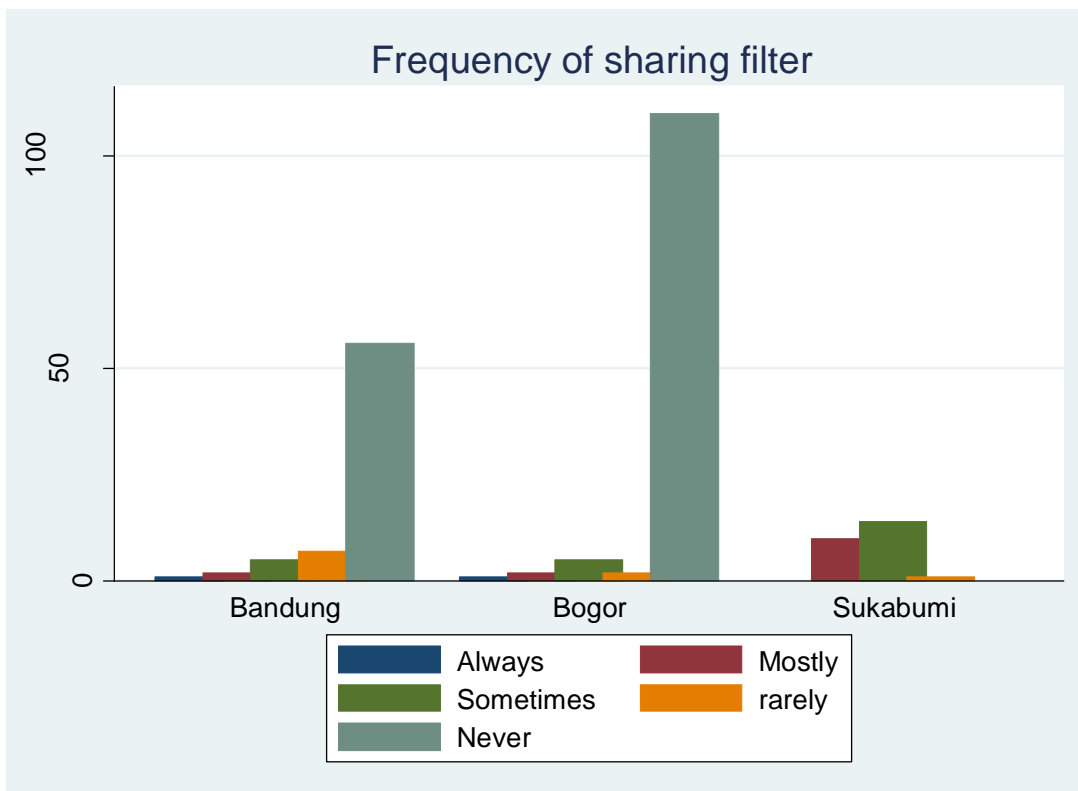


Table 39. Frequency of sharing water

City	Always	In majority cases	In half cases	Sometimes	Rarely	Never	No answer
Bandung	2 (3)	10 (14)	2 (3)	20 (30)	10 (14)	25 (37)	-
Bogor	4 (3)	10 (8)	2 (2)	38 (32)	12 (10)	55 (46)	-
Sukabumi	-	10 (36)	-	15 (60)	1 (4)	-	-

Figure 34. Frequency of sharing water

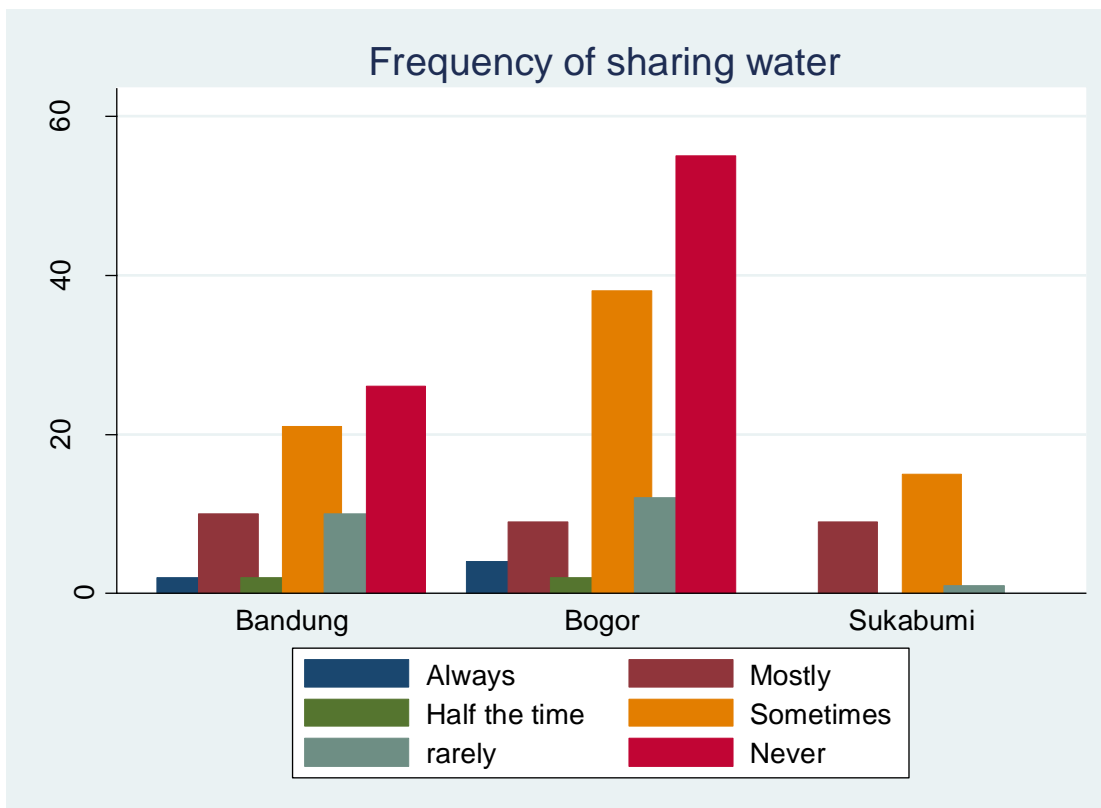


Table 40. Method of sharing water

City	From other's container	Common container	Other
Bandung	52 (75)	12 (18)	5 (7)
Bogor	32 (26)	77 (64)	12 (10)
Sukabumi	18 (68)	6 (24)	2 (8)

Figure 35. Method of sharing water

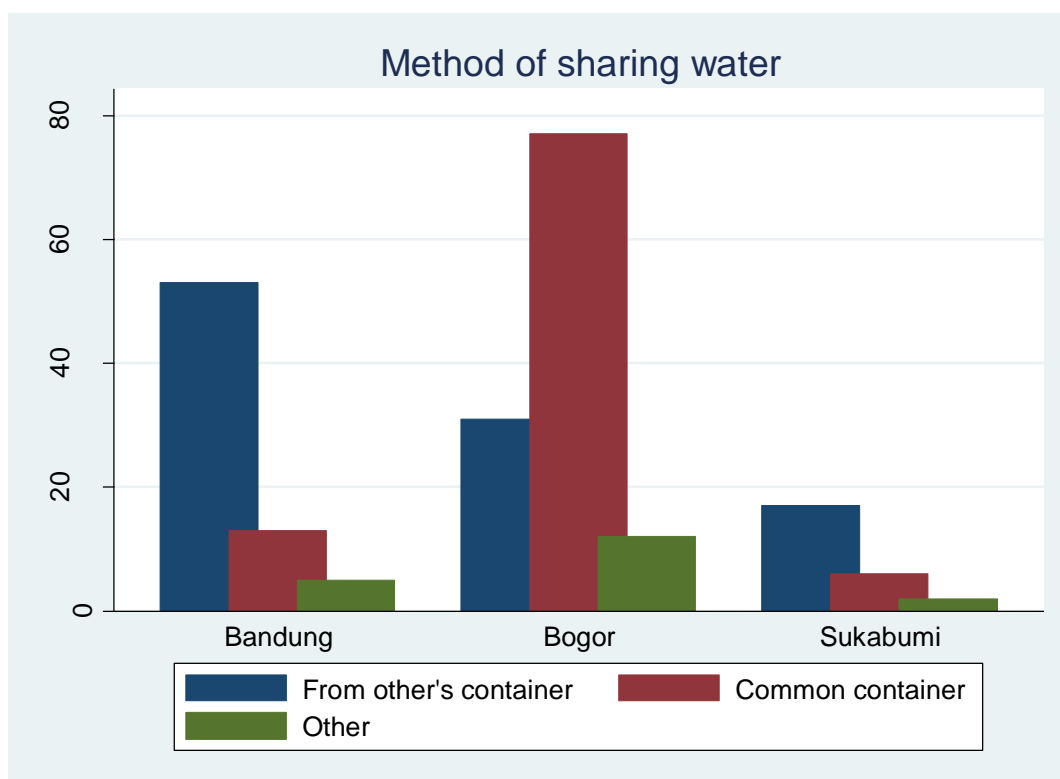




Table 41. Organization distribute sterile water

City	Yes	No
Bandung	-	69 (100)
Bogor	-	121 (100)
Sukabumi	-	26 (100)

Figure 36. Availability of sterile water from CAHR organization

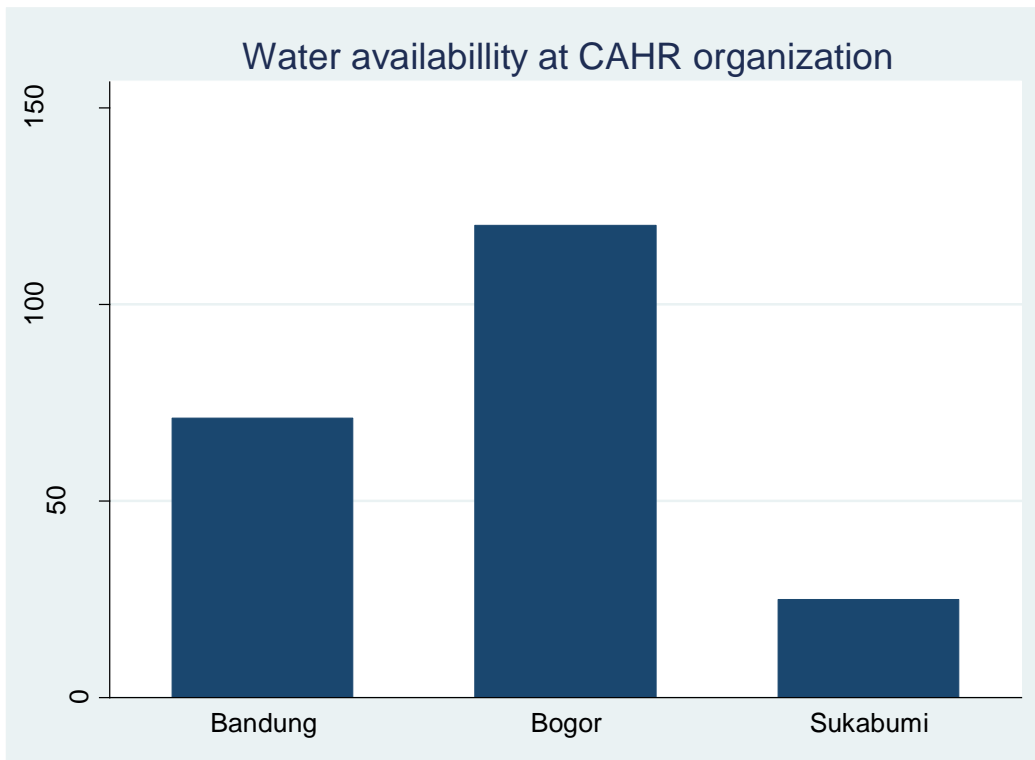


Table 42. Main location to inject

City	Home, alone	Friend's home	Public spots	Other
Bandung	14	26	22	-
Bogor	68	66	70	3
Sukabumi	16	11	15	-

Figure 37. Main location to inject

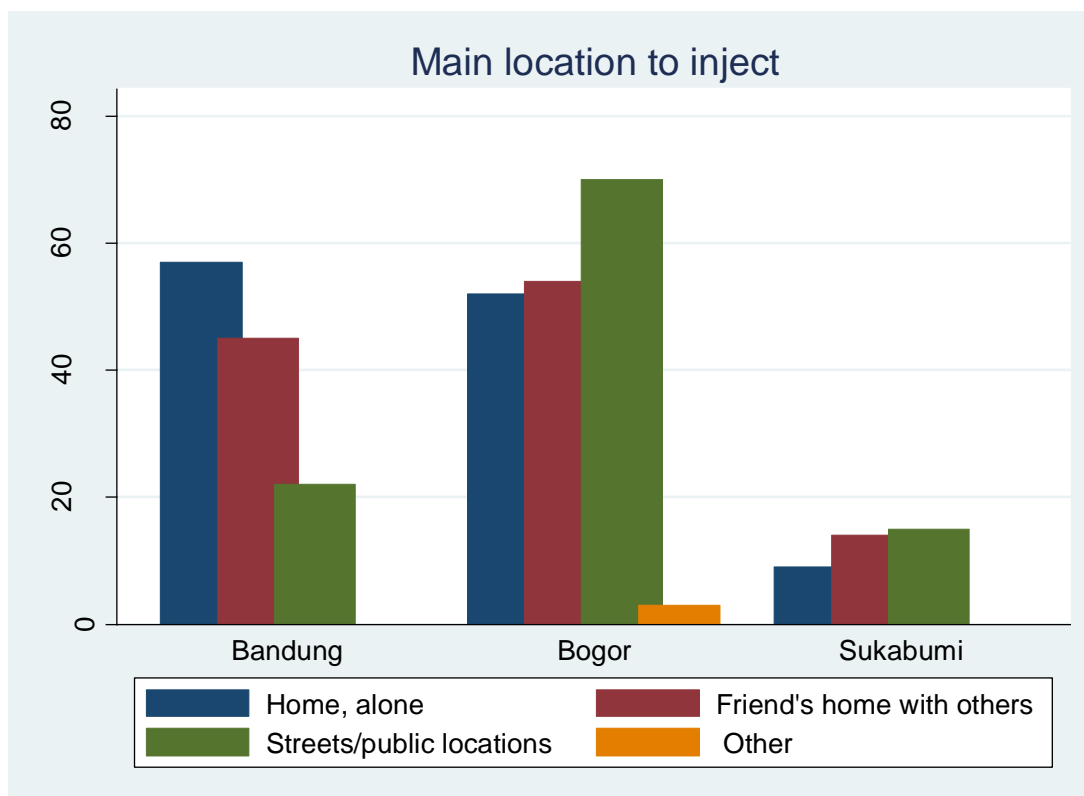


Table 43. Injecting in company of others

City	Always	Mostly	Half the time	Mostly alone	Always alone
Bandung	58	55	38	30	60
Bogor	107	83	81	74	111
Sukabumi	25	13	17	16	25

Figure 38. Injecting in company with others

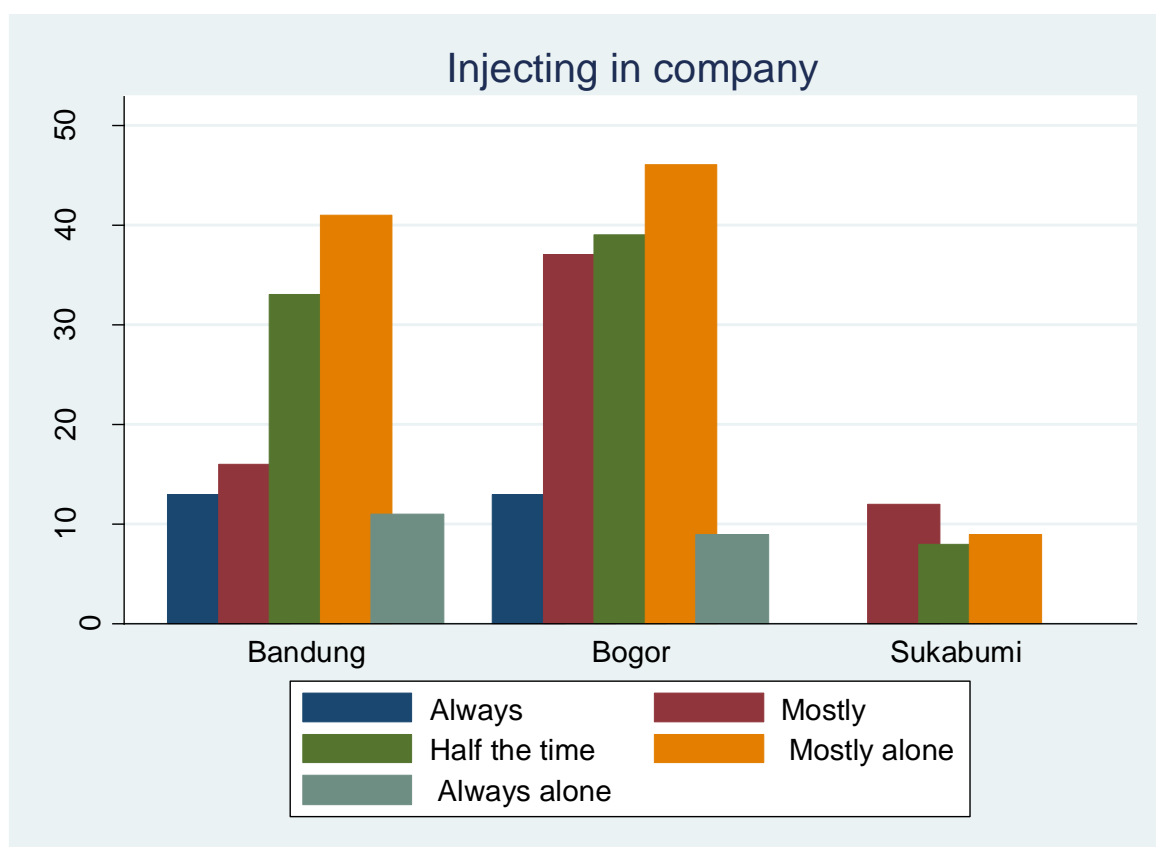


Table 44. Method of first injection

City	Inject by self	Assisted by friend	Assisted by sex partner	Other
Bandung	7 (11)	7 (11)	55 (78)	-
Bogor	8 (6)	10 (8)	103 (86)	-
Sukabumi	-	1 (4)	25 (96)	-

Figure 39. Method of first injection

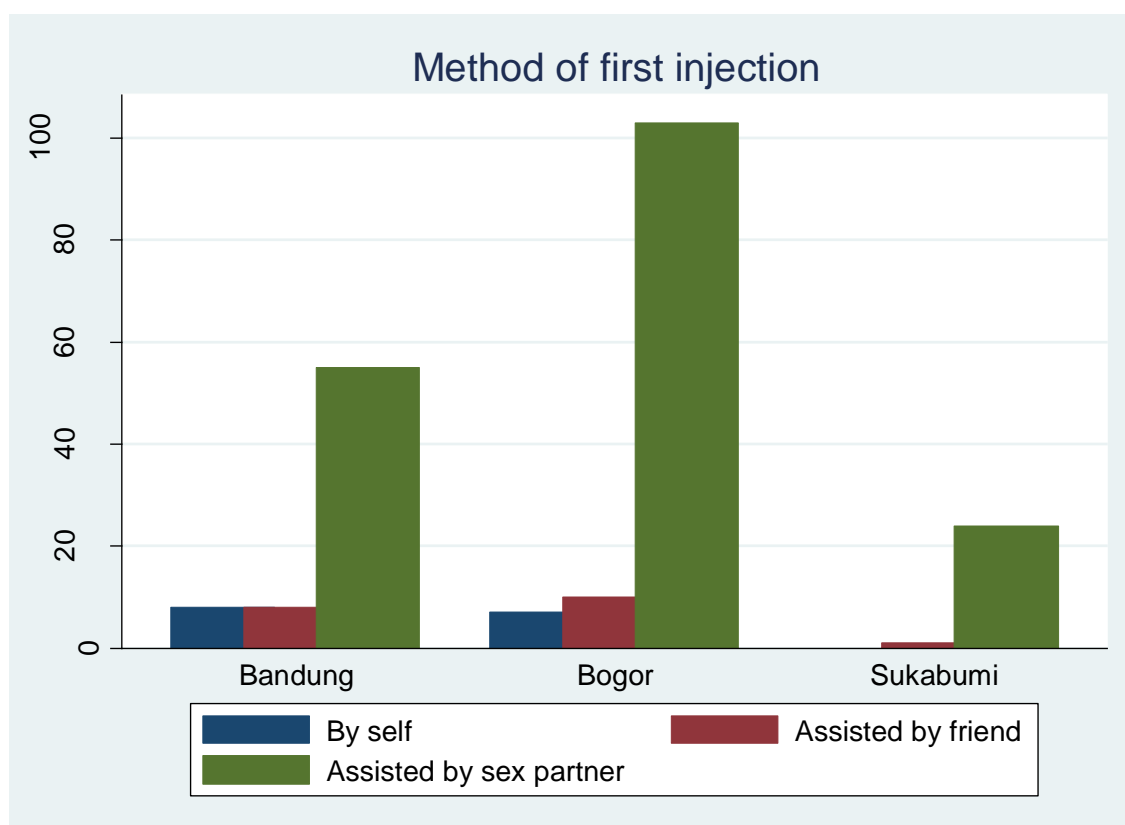


Table 45. Use of alcohol swab

City	Before & after injection	Always before	Always after	Often use swab	Rarely	Never
Bandung	29 (42)	-	27 (39)	3 (4)	8 (12)	2 (3)
Bogor	20 (16)	1 (1)	19 (16)	12 (10)	69 (58)	-
Sukabumi	9 (32)	2 (8)	5 (20)	6 (24)	4 (16)	-

Figure 40. Use of alcohol swab

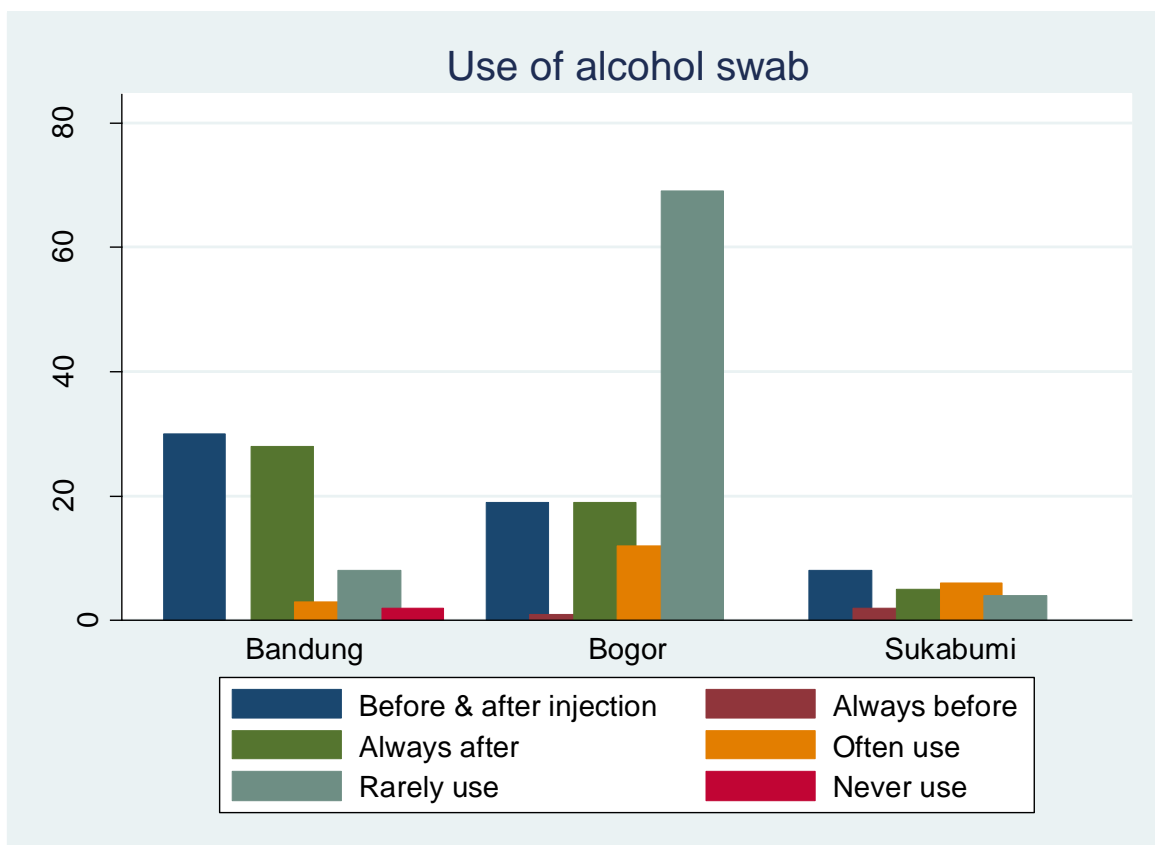


Table 46. Method of swabbing

City	Wipe before & after	Use before injecting	Use after injecting
Bandung	35 (51)	2 (3)	32 (46)
Bogor	50 (41)	2 (2)	70 (58)
Sukabumi	20 (76)	6 (3)	4 (16)

Figure 41. Method of swabbing

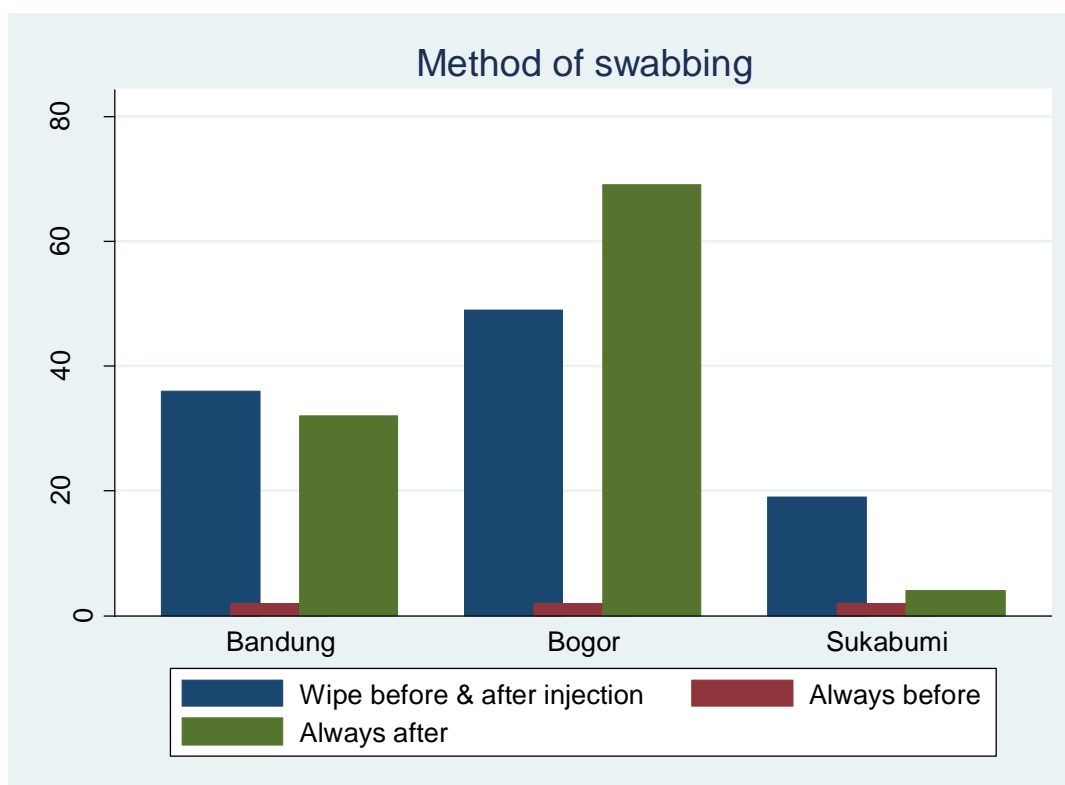


Table 47. Have enough alcohol swabs

City	Get as many as needed	Not enough	Swabs rarely provided	No distribution
Bandung	63 (92)	4 (6)	2 (3)	-
Bogor	103 (85)	18 (15)	-	-
Sukabumi	25 (96)	1 (4)	-	-

Figure 42. Adequate receipt of alcohol swabs

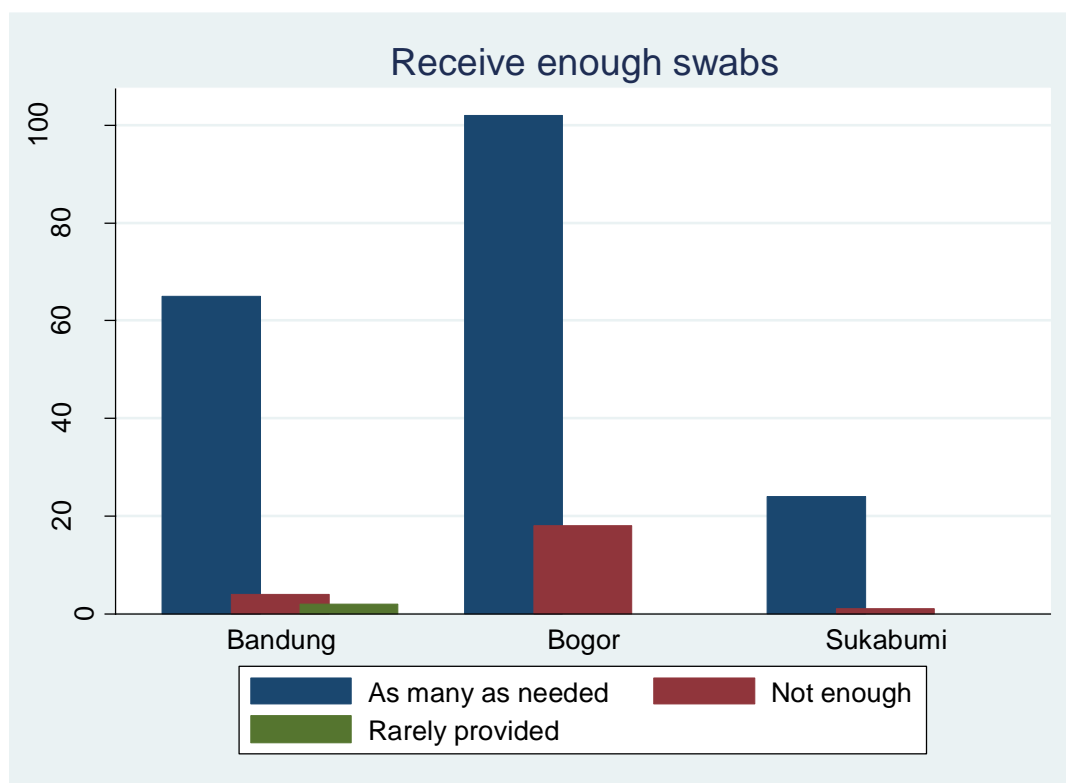


Table 48. Preparing drug in a single container

City	Yes	No
Bandung	45 (65)	24 (35)
Bogor	97 (81)	24 (20)
Sukabumi	26 (100)	-

Figure 43. Preparing drug in a single container

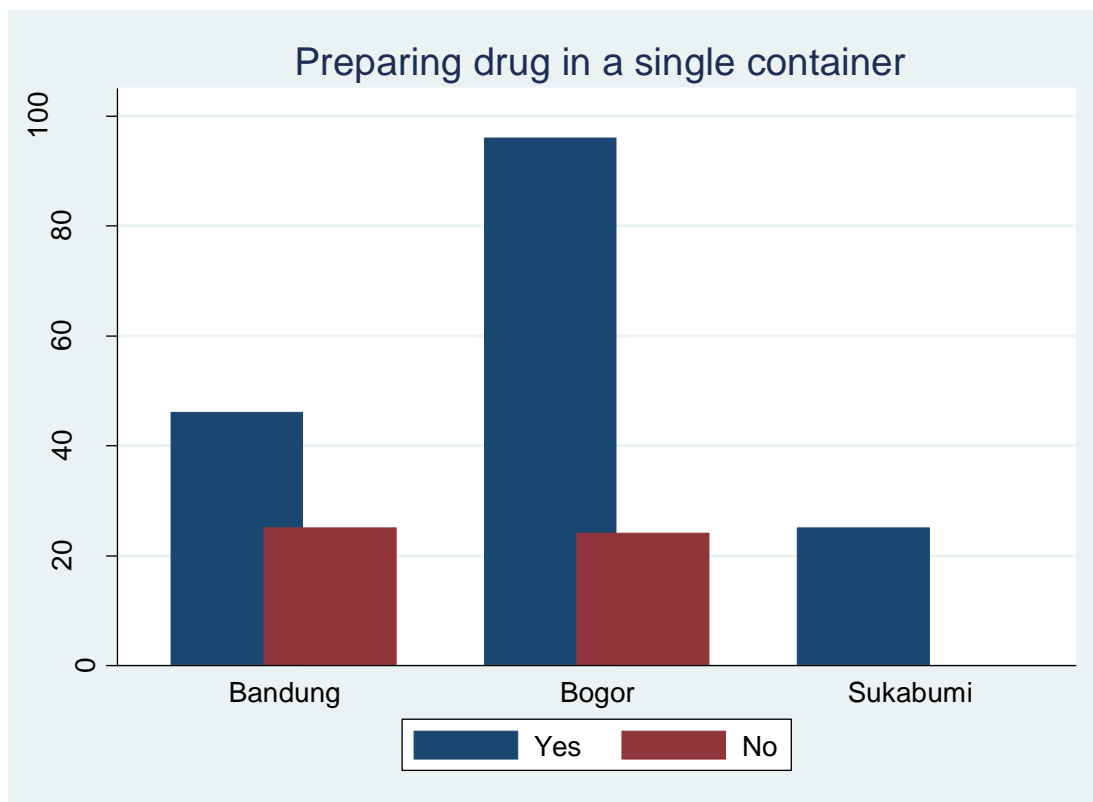




Table 49. Method to distribute drug

City	Drawn with own syringe	Poured from other's syringe	Poured from a larger syringe	Other
Bandung	24 (55)	17 (41)	1 (2)	1 (2)
Bogor	9 (9)	85 (90)	-	1 (1)
Sukabumi	3 (12)	21 (88)	-	-

Figure 44. Method to distribute drug

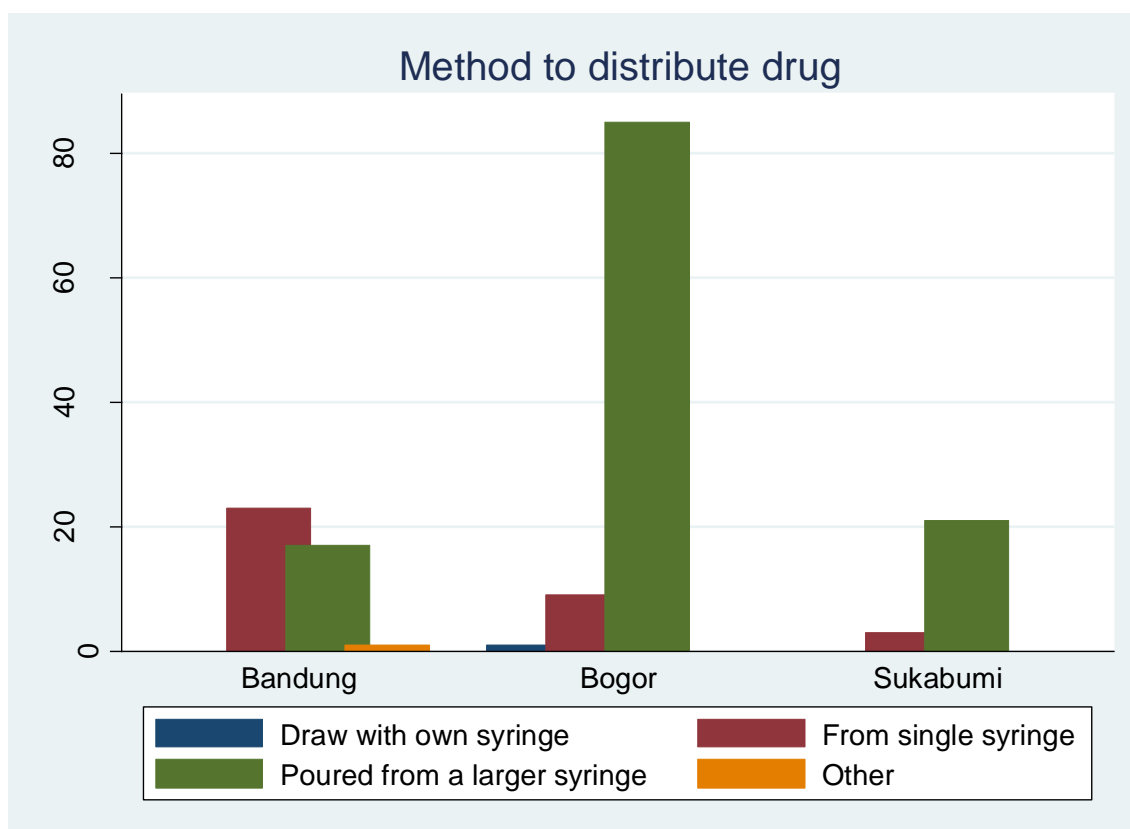
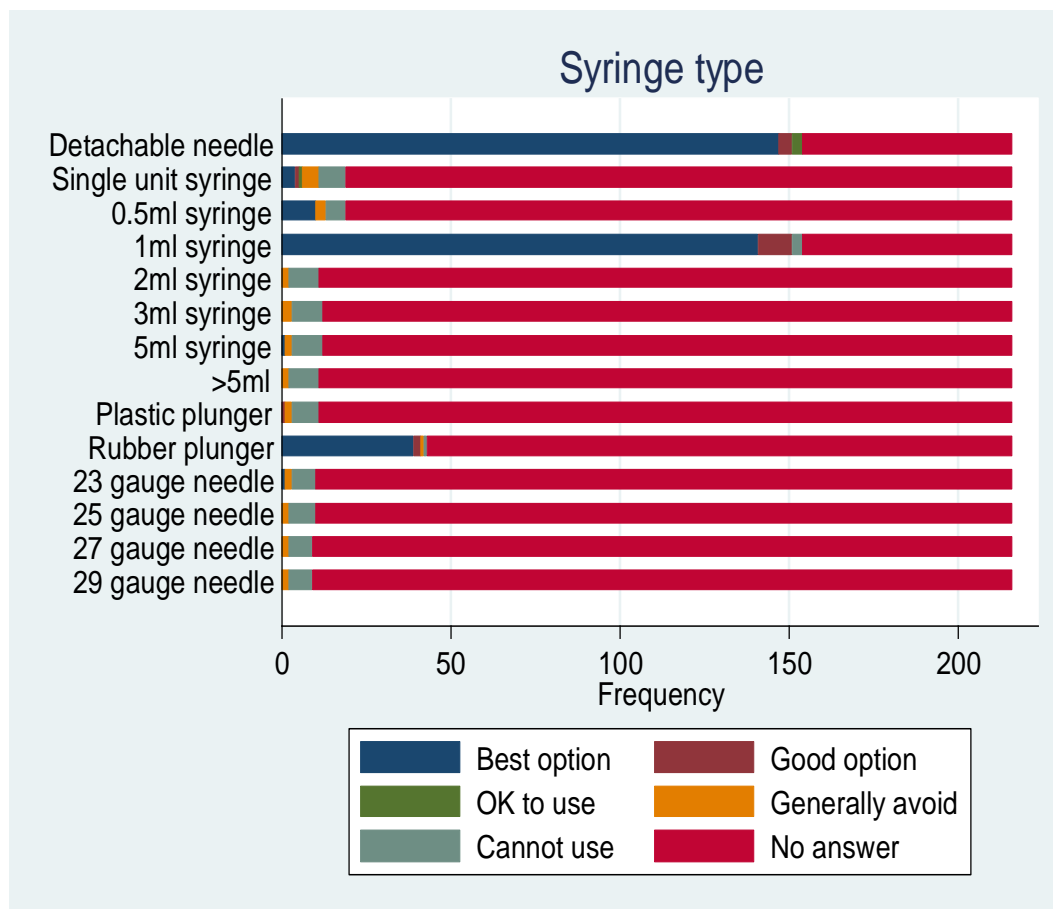


Table 50. Preference for syringe type

Syringe/needle type	Best option	Good option	OK to use	Generally avoid	Cannot use	No answer
Detachable needle	147 (68)	4 (2)	3 (1)	-	-	62 (29)
Single unit syringe	4 (2)	1 (0)	1 (0)	5 (3)	8 (4)	197 (91)
0.5ml syringe	10 (5)	-	-	3 (1)	6 (3)	197 (91)
1ml syringe	141 (65)	10 (5)	-	-	3 (1)	62 (29)
2ml syringe	-	-	-	2 (1)	9 (4)	205 (95)
3ml syringe	-	-	-	3 (2)	9 (4)	204 (94)
5ml syringe	1 (0)	-	-	2 (1)	9 (4)	204 (94)
>5ml syringe	-	-	-	2 (1)	9 (4)	205 (95)
Plastic plunger	-	1 (0)	-	2 (1)	8 (4)	205 (95)
Rubber plunger	1 (18)	2 (1)	-	1 (1)	1 (0)	173 (80)
23 gauge needle	1 (1)	2 (1)	-	-	7 (3)	206 (95)
25 gauge needle	-	-	-	2 (1)	8 (4)	206 (95)
27 gauge needle	-	-	-	2 (1)	7 (3)	207 (96)
29 gauge needle	-	-	-	2 (1)	7 (3)	207 (96)

Figure 45. Preference for syringe type



3. Police and law

Table 51. Ever arrested

City	Yes	No	No answer
Bandung	33 (47)	36 (53)	-
Bogor	63 (52)	58 (48)	-
Sukabumi	17 (64)	9 (36)	-

Figure 46. Ever arrested

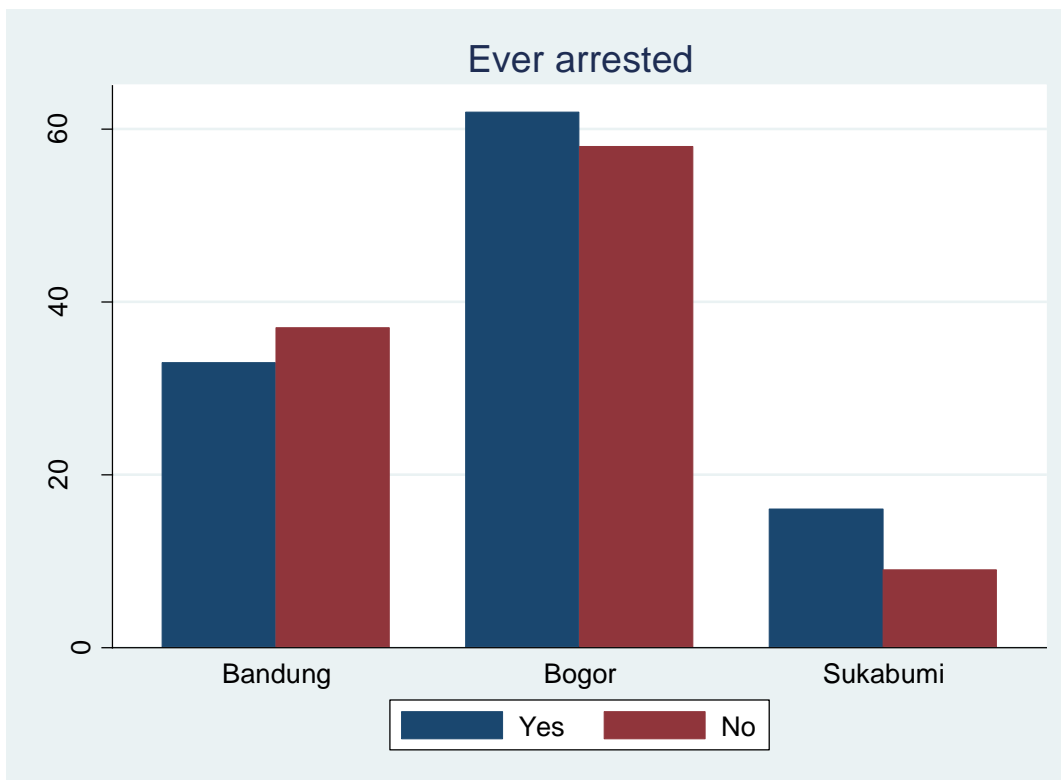


Table 52. Arrested this year

City	Yes	No	No answer
Bandung	12 (36)	21 (63)	-
Bogor	13 (21)	48 (77)	1
Sukabumi	11 (69)	5 (31)	-

Figure 47. Arrested this year

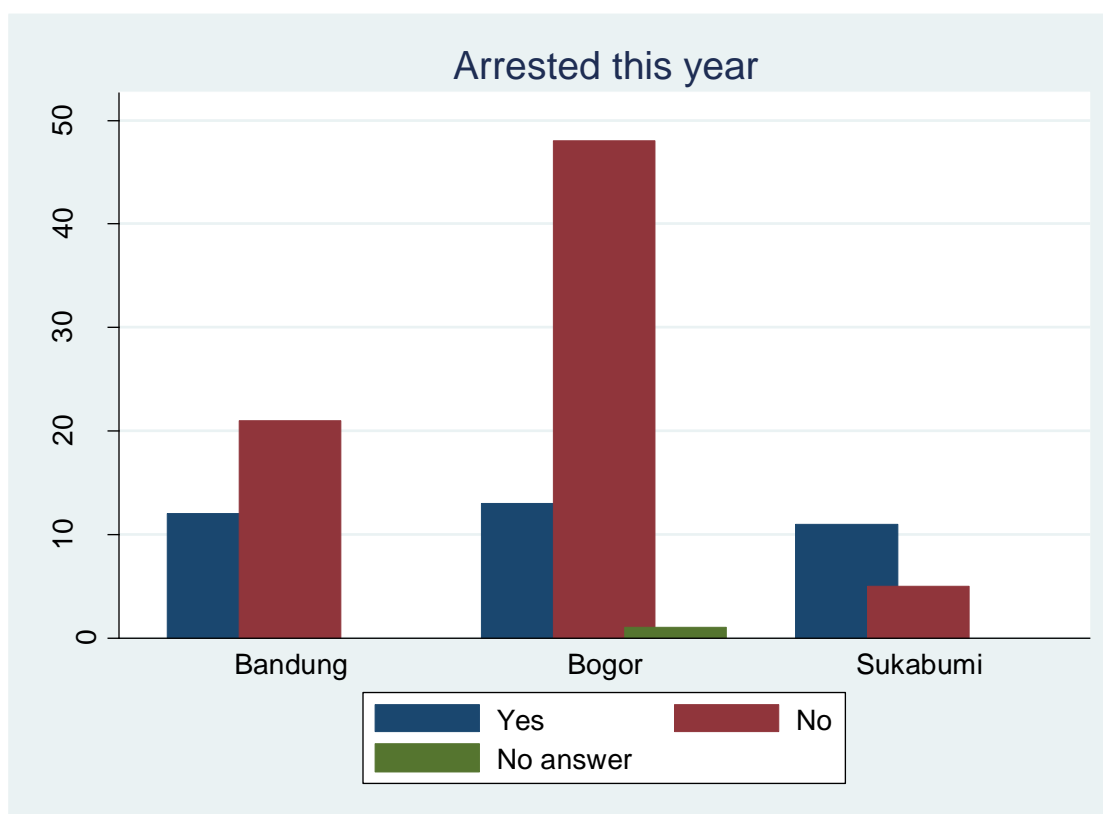


Table 53. Ever compulsory treatment

City	Yes	No	No answer
Bandung	11 (16)	58 (84)	-
Bogor	10 (8)	111 (92)	-
Sukabumi	3 (8)	23 (92)	-

Figure 48. Ever compulsory treatment

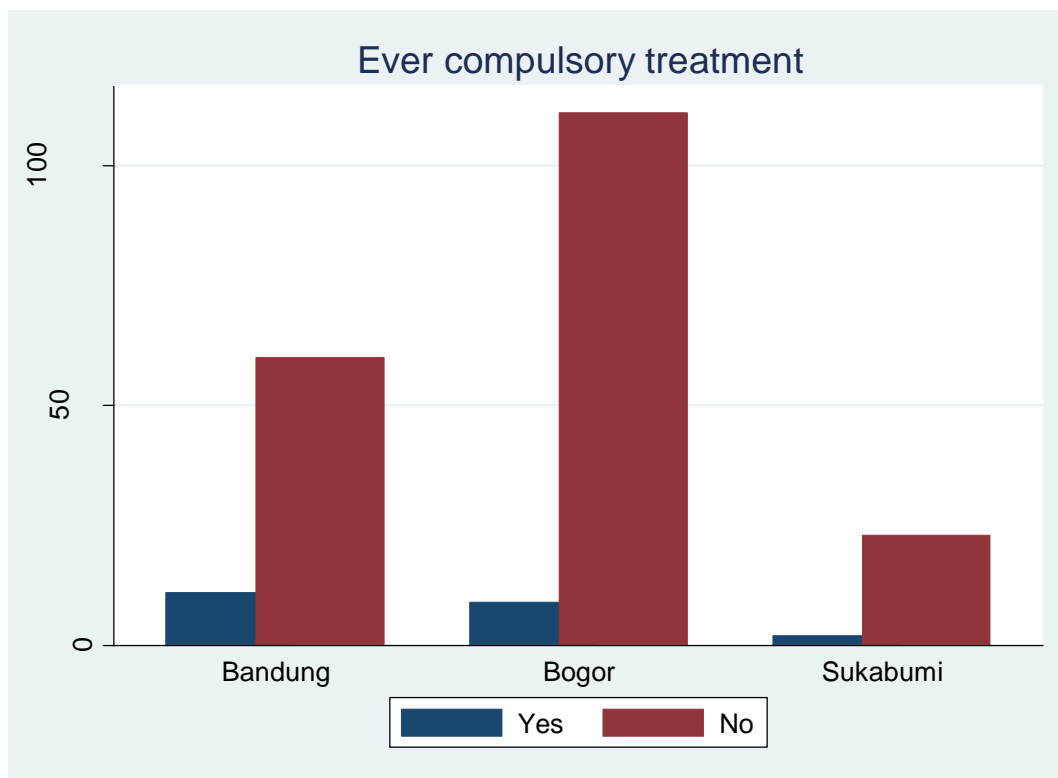
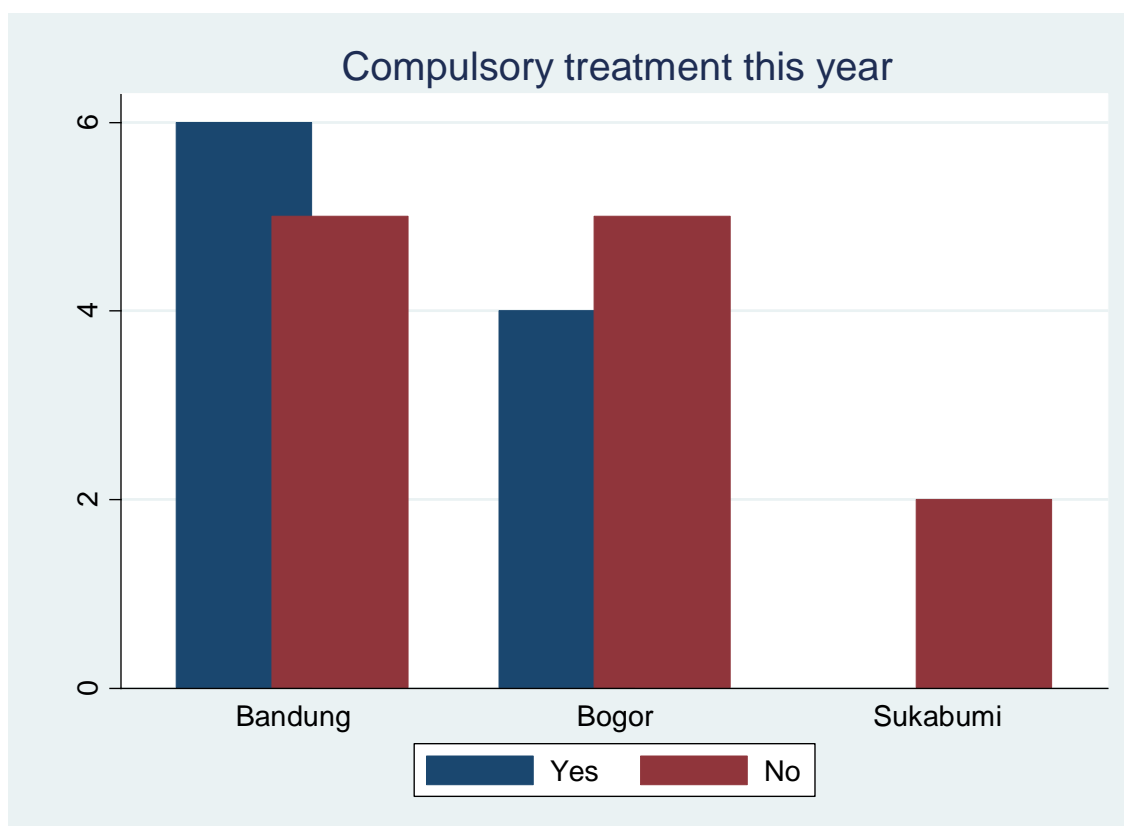


Table 54. Compulsory treatment this year

City	Yes	No	No answer
Bandung	6 (55)	5 (45)	-
Bogor	4 (44)	5 (56)	-
Sukabumi	-	2 (100)	-

Figure 49. Compulsory treatment this year



#### 4. Sexual behaviours

Table 55. Sex in past 12 months

City	Yes	No
Bandung	16 (23)	53 (77)
Bogor	17 (14)	104 (86)
Sukabumi	3 (12)	23 (88)

Figure 50. Sex in past 12 months

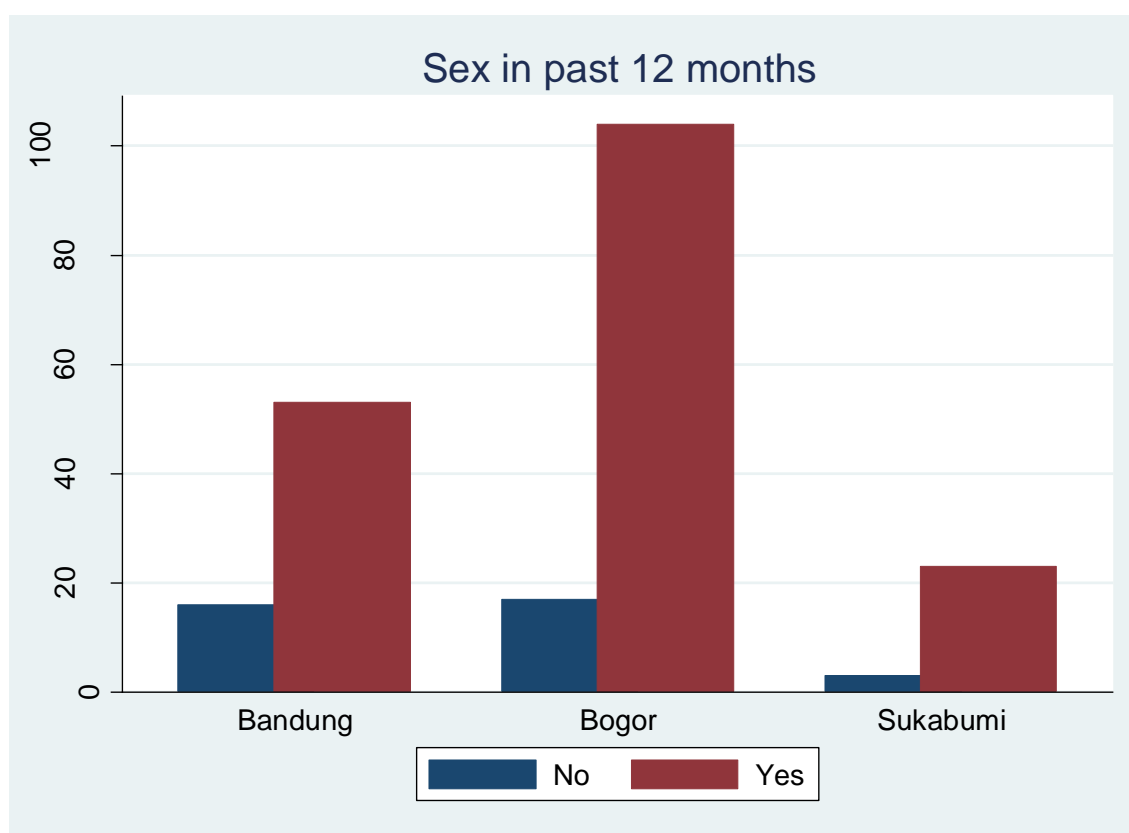


Table 56. Partnership type in last 12 months (yes)

City	Stable partner	Casual partner	Commercial sex partner
Bandung	36 (68)	18 (34)	10 (19)
Bogor	82 (79)	25 (24)	15 (14)
Sukabumi	21 (91)	2 (9)	1 (4)

Figure 51. Partnership type in past 12 months

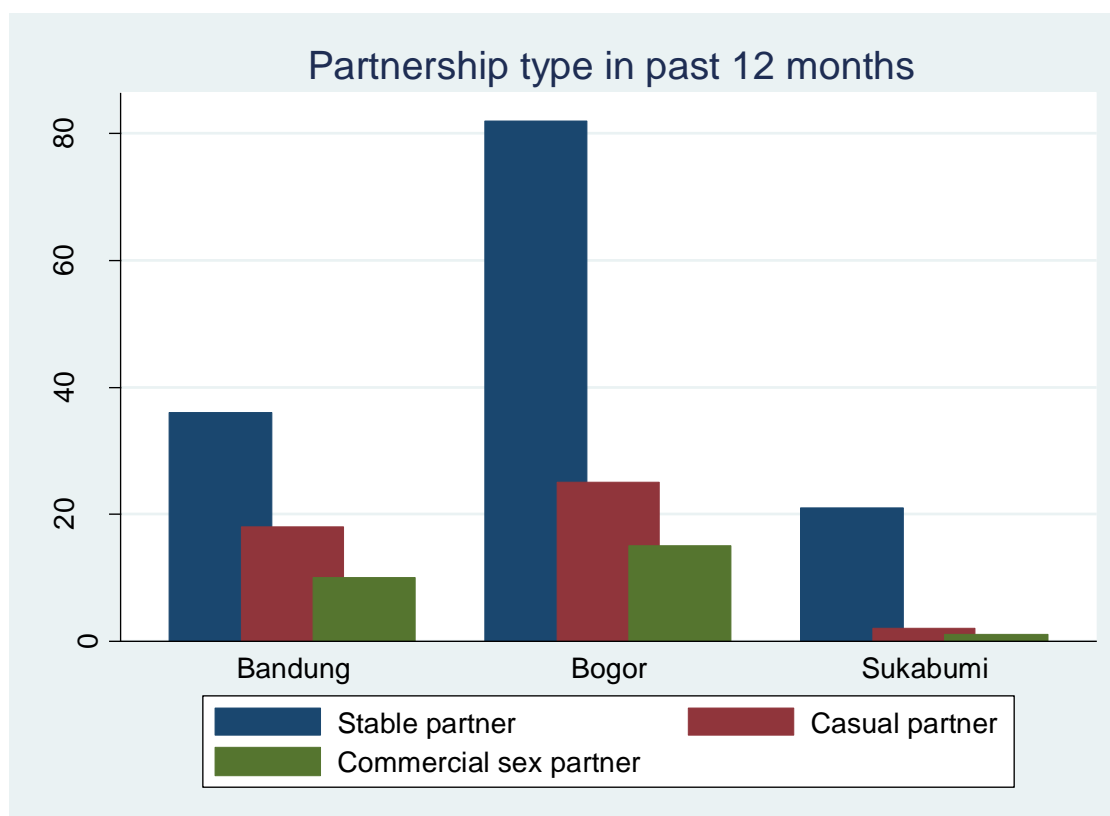




Table 57. Condom use at last sex

City	Stable partner		Casual partner		Commercial sex partner	
	Yes	No	Yes	No	Yes	No
Bandung	29 (81)	7 (19)	14 (78)	4 (22)	6 (67)	3 (33)
Bogor	35 (43)	47 (57)	14 (56)	11 (44)	9 (60)	6 (40)
Sukabumi	16 (76)	5 (24)	1 (50)	1 (50)	1 (100)	-

Figure 52. Condom use at last sex

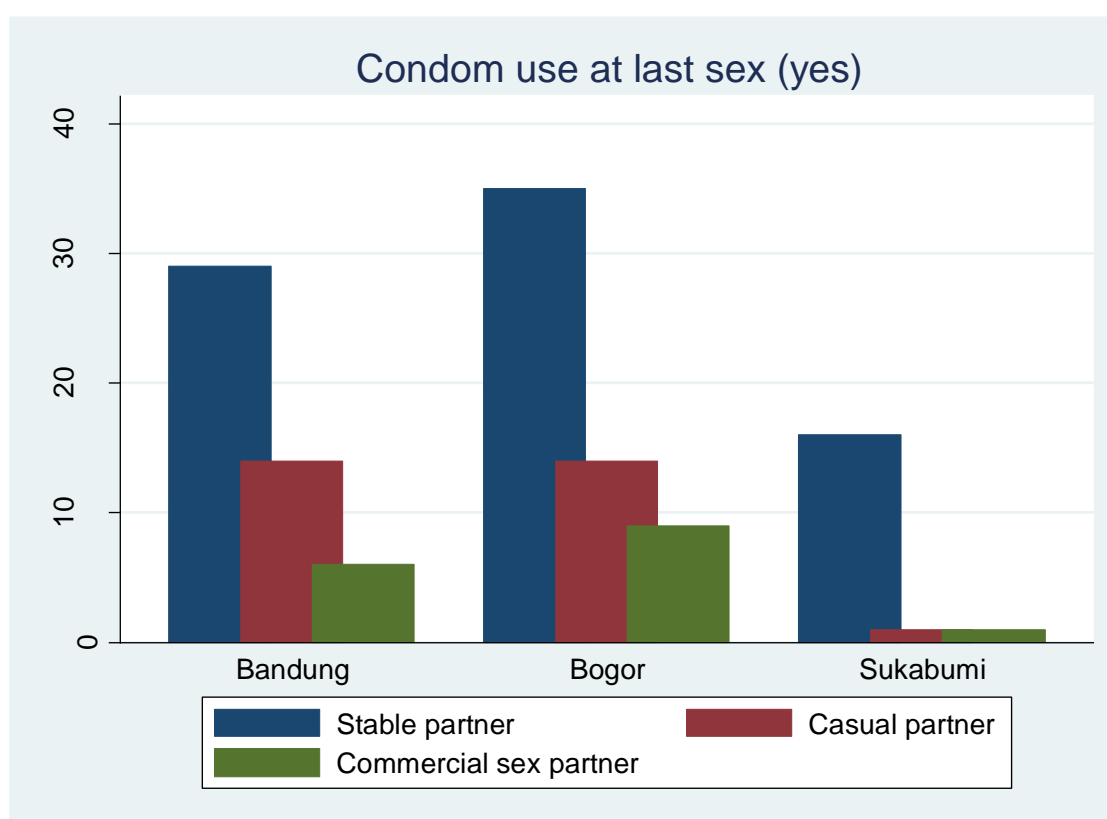


Table 58. Sex in last 30 days

City	Stable partner		Casual partner		Commercial sex partner	
	Yes	No	Yes	No	Yes	No
Bandung	31 (86)	5 (14)	12 (67)	6 (33)	5 (56)	4 (44)
Bogor	65 (79)	16 (21)	12 (48)	13 (52)	3 (20)	10 (67)
Sukabumi	20 (95)	1 (5)	1 (50)	1 (50)	1 (100)	-

Figure 53. Sex in last 30 days

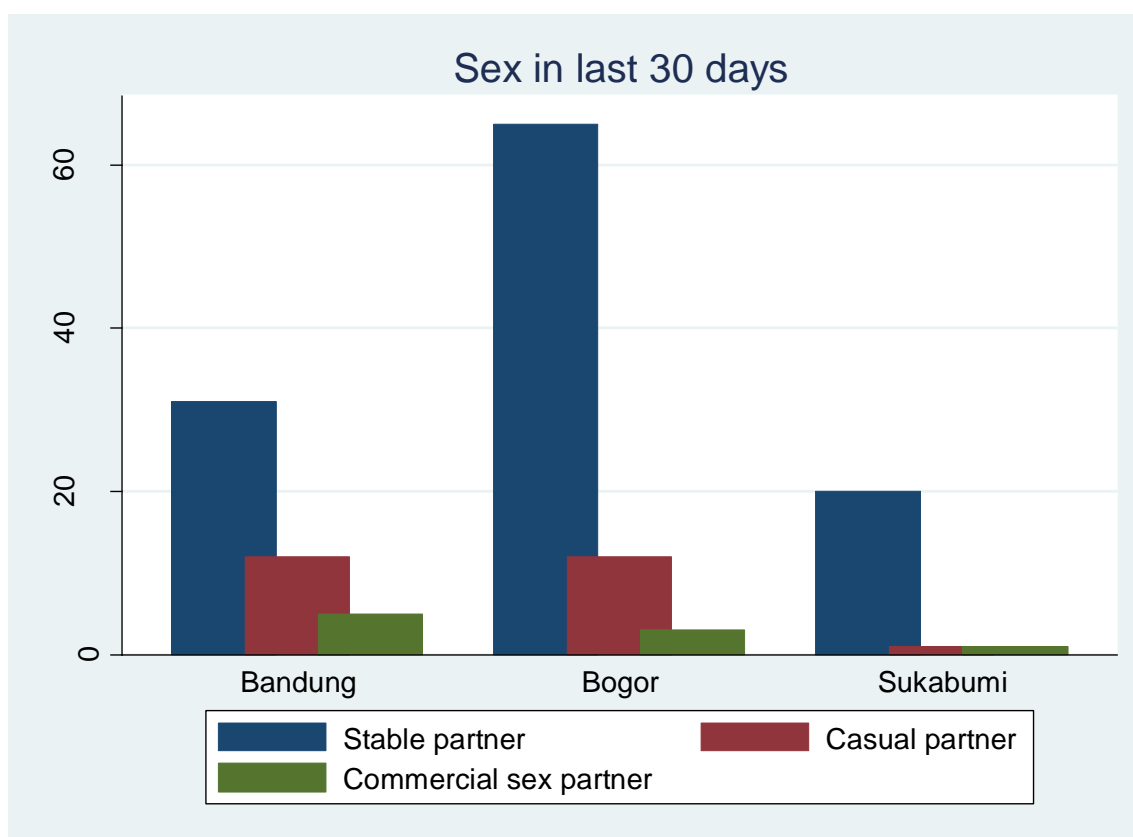


Table 59. Condom use in 30 days with stable partner

City	Always	In most occasions	In half of cases	Sometimes	Rarely	Never
Bandung	14 (45)	4 (13)	1 (3)	7 (23)	1 (3)	4 (13)
Bogor	12 (18)	8 (12)	2 (3)	14 (22)	7 (11)	22 (34)
Sukabumi	8 (40)	4 (20)	-	6 (30)	2 (10)	-

Figure 54. Condom use with stable partner in 30 days

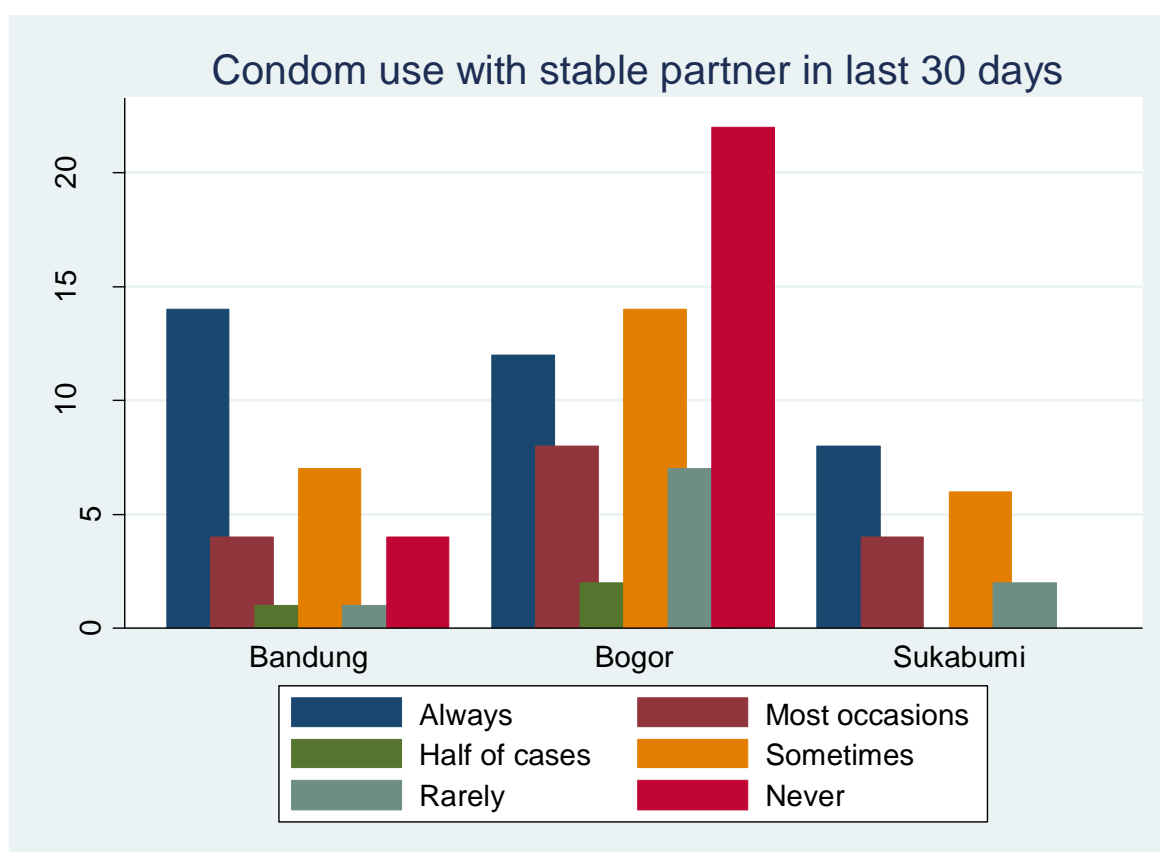


Table 60. Condom use with casual partner in last 30 days

City	Always	In most occasions	In half of cases	Sometimes	Rarely	Never
Bandung	6 (50)	2 (17)	-	3 (25)	-	1 (8)
Bogor	5 (42)	-	-	5 (42)	1 (8)	1 (8)
Sukabumi	-	1 (100)	-	-	-	-

Figure 55. Condom use in last 30 days with casual partner

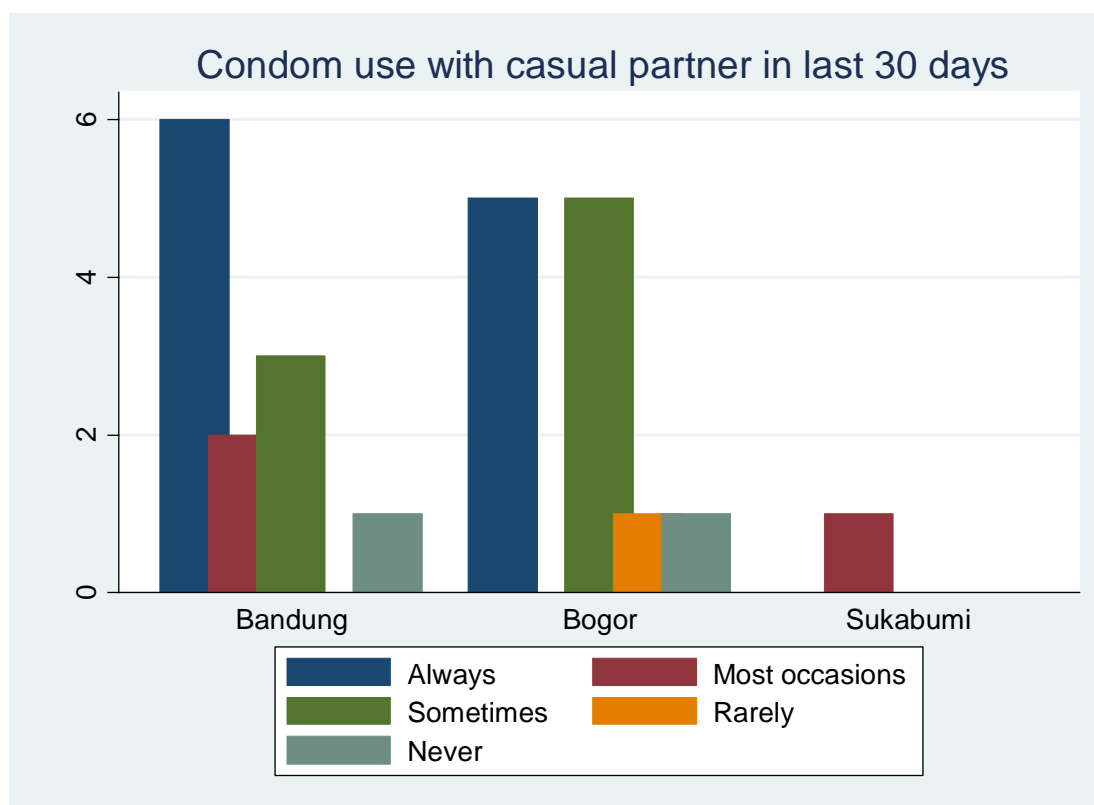


Table 61. Condom use with casual partner in last 30 days

City	Always	In most occasions	In half of cases	Sometimes	Rarely	Never
Bandung	5 (100)	-	-	-	-	-
Bogor	1 (33)	-	1 (33)	-	-	1 (33)
Sukabumi	-	1 (100)	-	-	-	-

Figure 56. Condom use with commercial partner in last 30 days

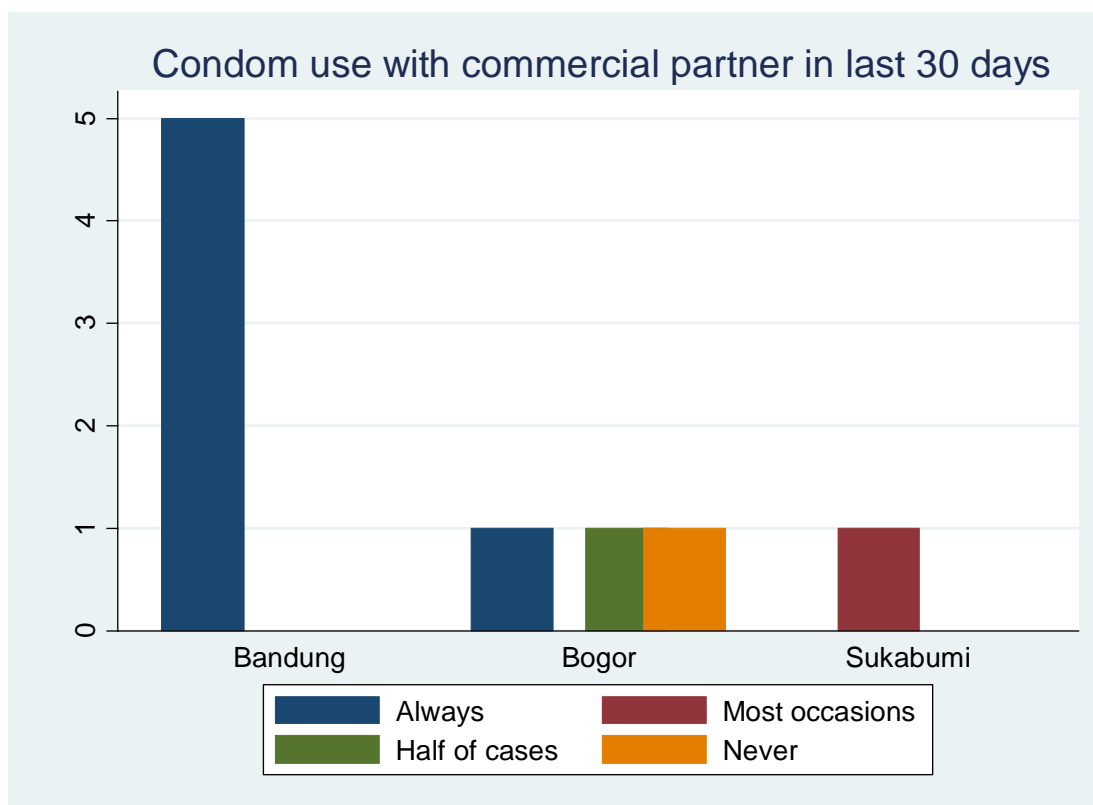


Table 62. Confirmation of condom use

City	Stable partner		Casual partner		Commercial sex partner	
	Yes	No, definitely	Yes	No, definitely	Yes	No, definitely
Bandung	1 (8)	12 (92)	1 (17)	5 (83)	-	5 (100)
Bogor	1 (25)	3 (75)	-	5 (100)	-	1 (100)
Sukabumi	2 (25)	6 (75)	-	-	-	6 (100)

Figure 57. Confirmation of condom use

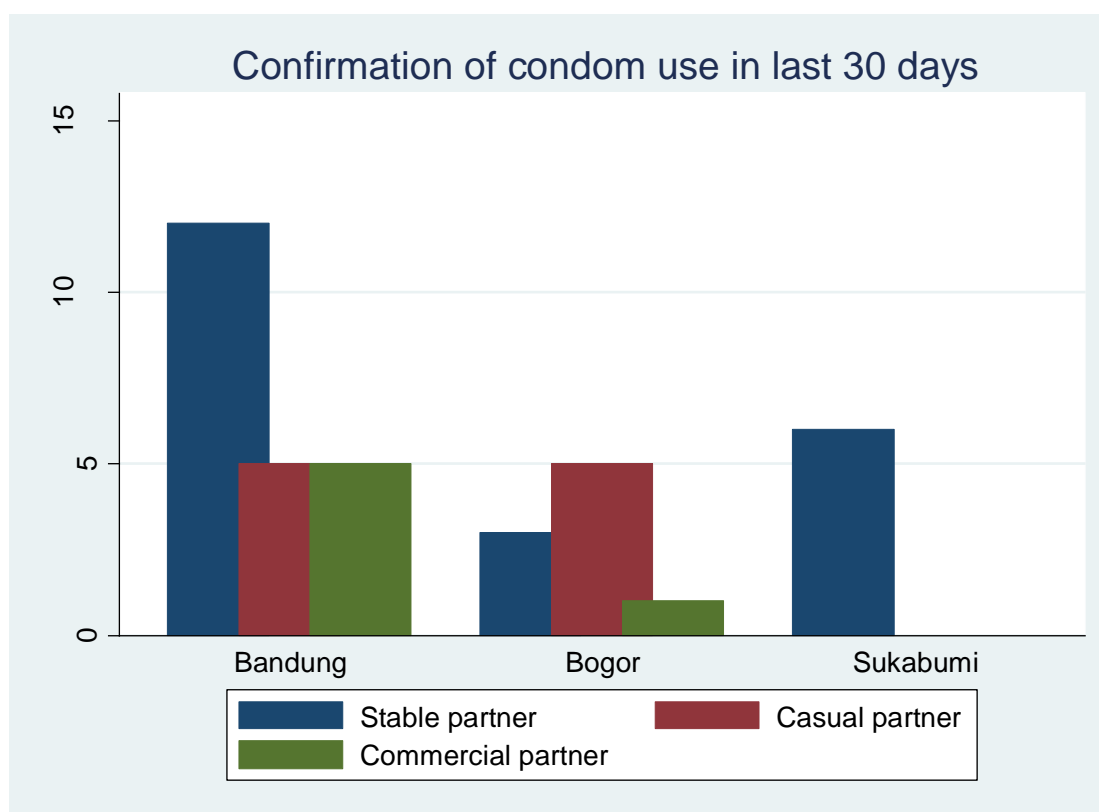


Table 63. Reason for not using condoms (yes)

Reason	Bandung	Bogor	Sukabumi
Not available then	8 (15)	18 (17)	4 (17)
Condoms lower senses	11 (21)	37 (36)	11 (48)
Expensive	-	-	-
Partner insisted on not using	-	15 (14)	7 (30)
Didn't consider it necessary	-	10 (10)	-
Didn't think about it at all	1 (2)	2 (2)	-
I was intoxicated	4 (8)	2 (2)	-
Under the influence of drugs	6 (11)	2 (2)	3 (13)
I was a victim of sexual abuse	-	-	-
Other	-	-	1 (4)
No answer	-	3 (3)	-

Figure 58. Reason for not using condoms

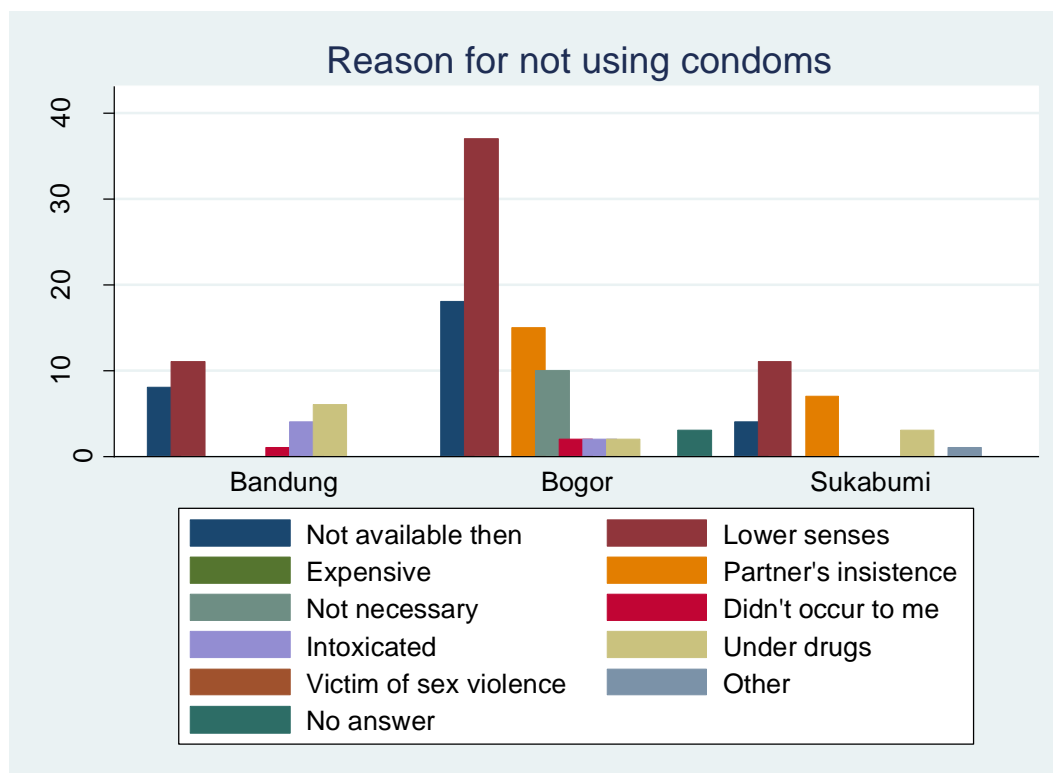


Table 64. Can condoms be socially acceptable?

City	Yes	Partially	No	No answer
Bandung	34 (64)	17 (32)	1 (2)	1 (2)
Bogor	54 (52)	47 (45)	2 (2)	1 (1)
Sukabumi	1 (4)	21 (91)	1 (4)	-

Figure 59. Acceptability of condoms

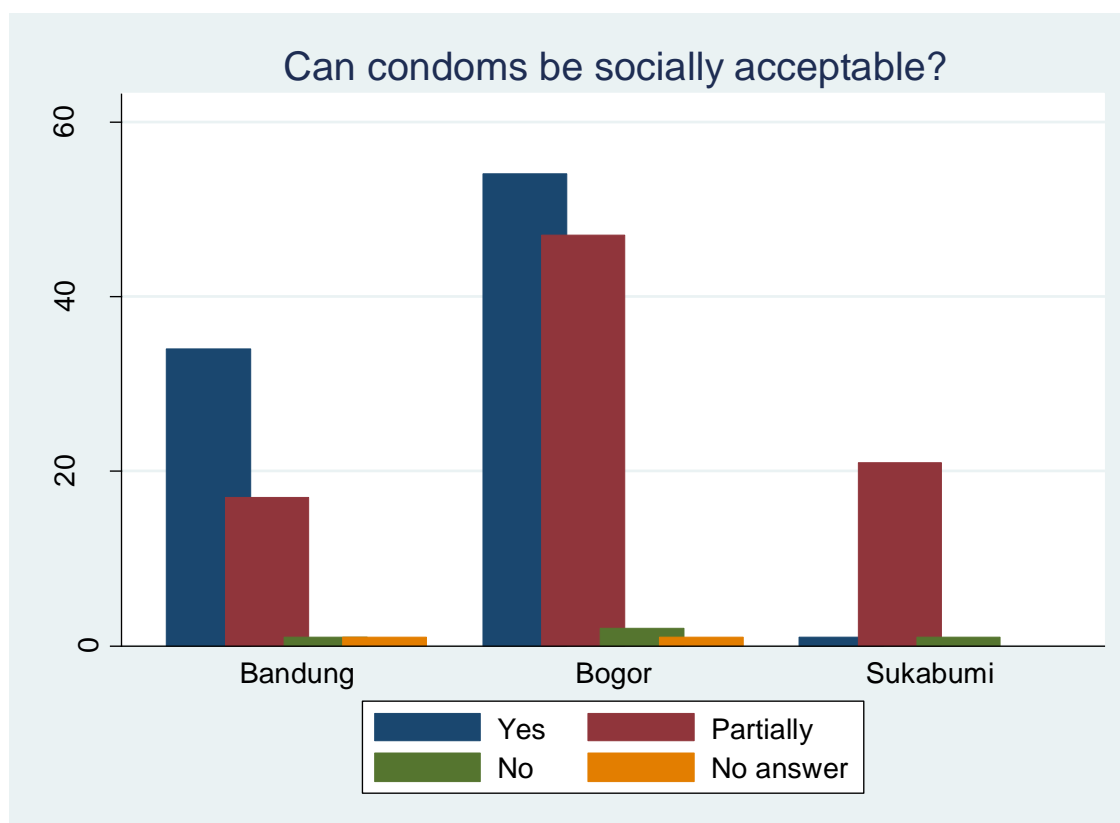
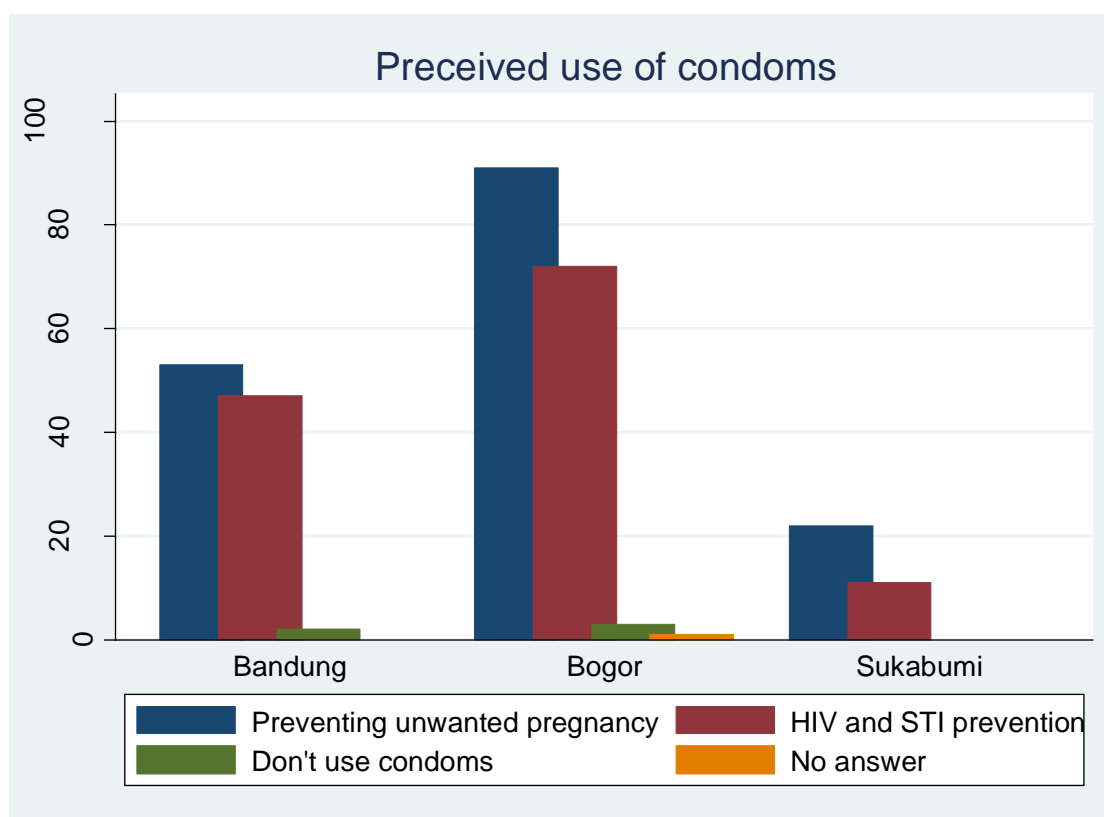




Table 65. Perceived use of condoms

City	Preventing undesired pregnancy	Prevention of HIV and STIs	Do not use condoms	No answer
Bandung	53 (100)	47 (89)	2 (4)	-
Bogor	91 (88)	72 (69)	3 (3)	1 (1)
Sukabumi	22 (96)	11 (48)	-	-

Figure 60. Perceived use of condoms

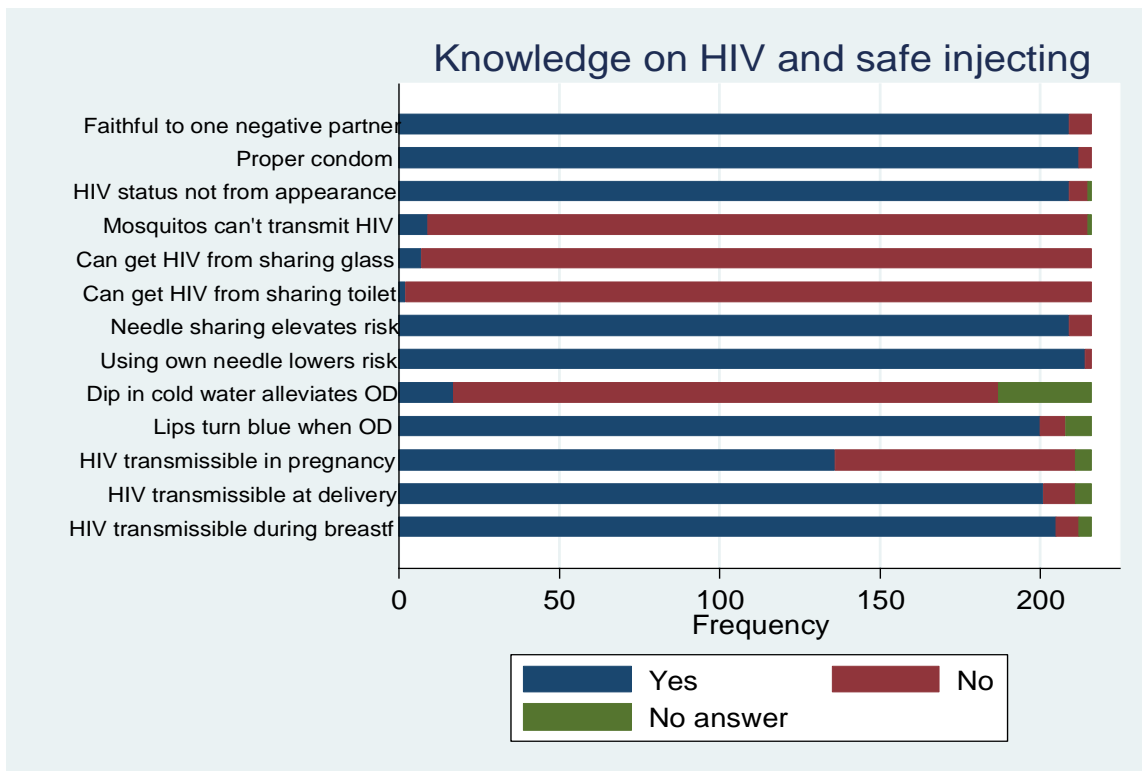


5. Knowledge of HIV and injecting risks

Table 66. Knowledge on HIV and safe injecting

Question	Yes	No	No answer
Can avoid infection with one, negative partner	209 (97)	7 (3)	-
Can avoid HIV by using condom correctly	212 (98)	4 (2)	-
Person looking healthy can be HIV+	209 (97)	6 (2)	1 (1)
Mosquito bites cannot transmit HIV	9 (4)	206 (95)	1 (1)
Can contract HIV from sharing same glass	7 (3)	209 (97)	-
Can contract HIV from sharing toilet, pool, sauna	2 (1)	214 (99)	-
Using shared needle increases HIV risk	209 (97)	7 (3)	-
Not using other's needle lowers HIV risk	214 (99)	2 (1)	-
Putting someone in cold tub is first aid to overdose	17 (8)	170 (79)	29 (13)
Lips turn blue when overdosing	200 (92)	8 (4)	8 (4)
HIV can be transmitted during pregnancy	136 (63)	75 (35)	5 (2)
HIV can be transmitted during delivery	201 (93)	10 (5)	5 (2)
HIV can be transmitted during breastfeeding	205 (95)	7 (3)	4 (2)

Figure 61. Knowledge on HIV and safe injecting



6. HIV testing

Table 67. Know HIV test clinics in your city?

City	Yes	No	No answer
Bandung	69 (100)	-	-
Bogor	119 (98)	2 (2)	-
Sukabumi	26 (100)	-	-

Figure 62. Know HIV test clinics in your city?

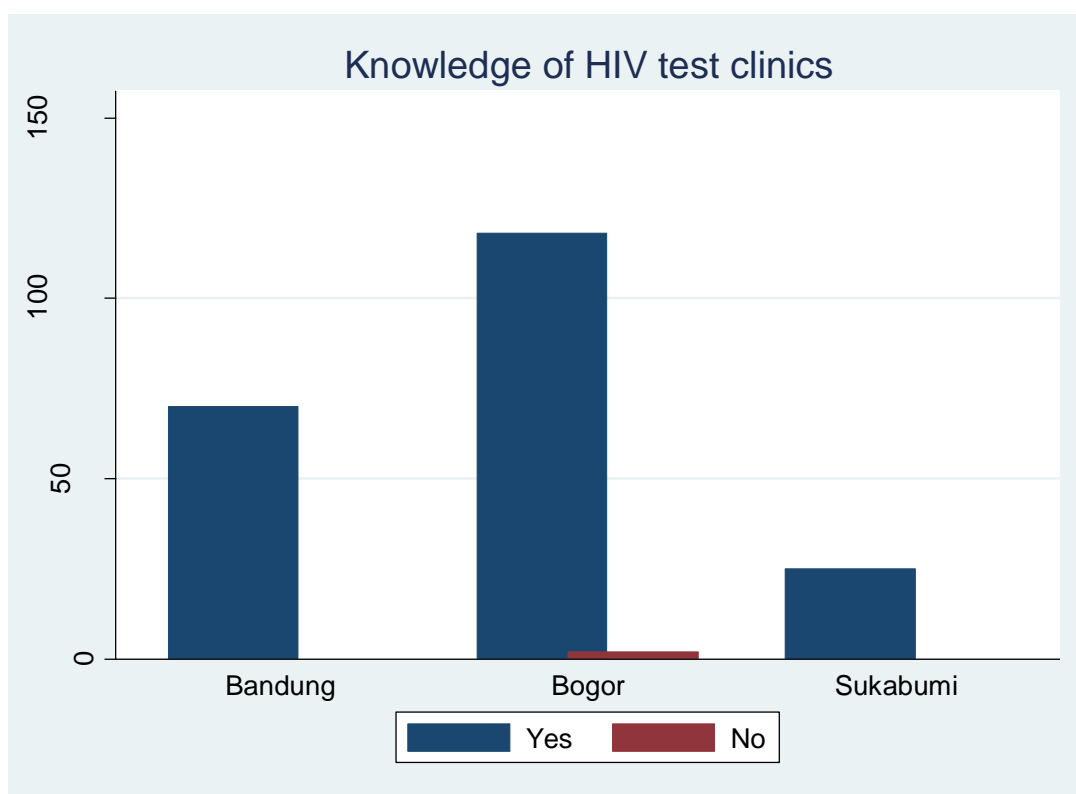


Table 68. Possibility of anonymous testing

City	Yes	No	No answer
Bandung	67 (98)	-	2 (2)
Bogor	117 (97)	1 (1)	3 (2)
Sukabumi	26 (100)	-	-

Figure 63. Anonymous testing possible?

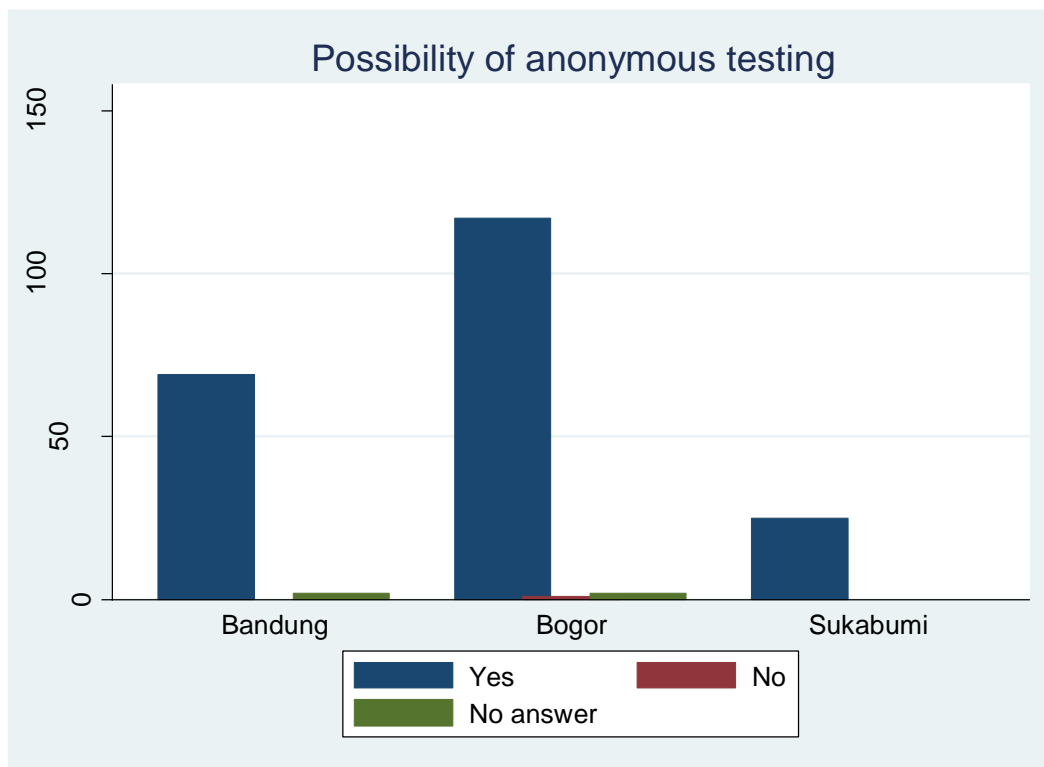


Table 69. Ever tested before

City	Yes	No	No answer
Bandung	61 (89)	7 (10)	1 (1)
Bogor	115 (95)	5 (4)	1 (1)
Sukabumi	26 (100)	-	-

Figure 64. Ever tested for HIV

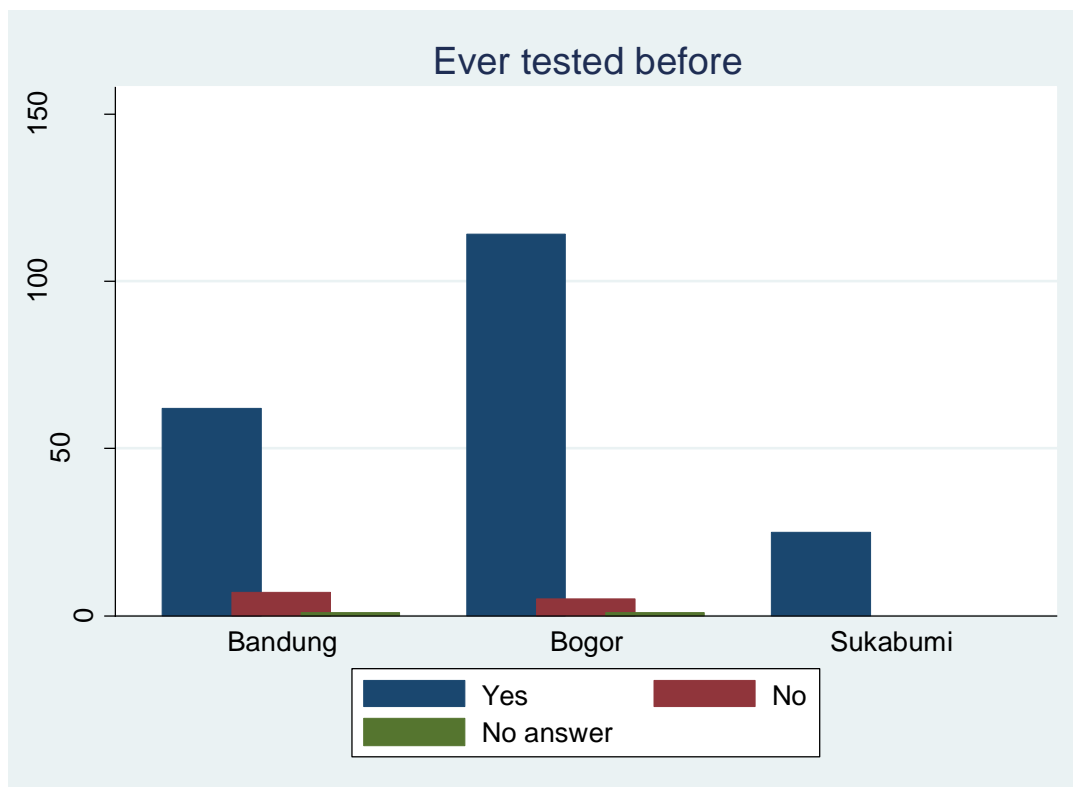


Table 70. Reason for not having tested

Reason	Bandung	Bogor	Sukabumi
Don't know where to go	-	2 (2)	-
No testing point in my city	-	-	-
Don't know where test point is	-	-	-
No money for the test	-	-	-
Their hours don't fit my schedule	-	-	-
The location doesn't suit me	-	-	-
Staff attitude is an issue to me	-	-	-
Fear status will be made public	2 (3)	1 (1)	-
Fear government know it	1 (1)	1 (1)	-
Other	4 (6)	1 (1)	-

Figure 65. Reason for not testing

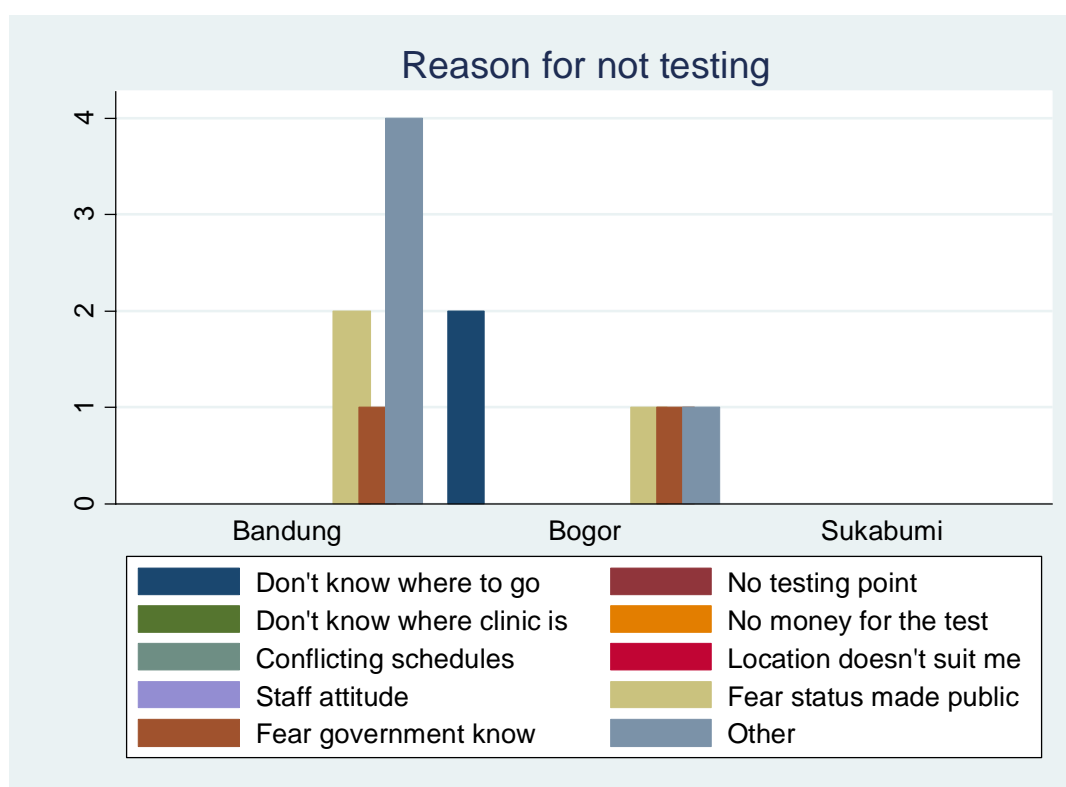


Table 71. Would you test in the community setting?

City	Yes	No	No answer
Bandung	2 (29)	3 (42)	2 (29)
Bogor	3 (60)	1 (20)	1 (20)
Sukabumi	-	-	-

Figure 66. Would you test in the community setting?

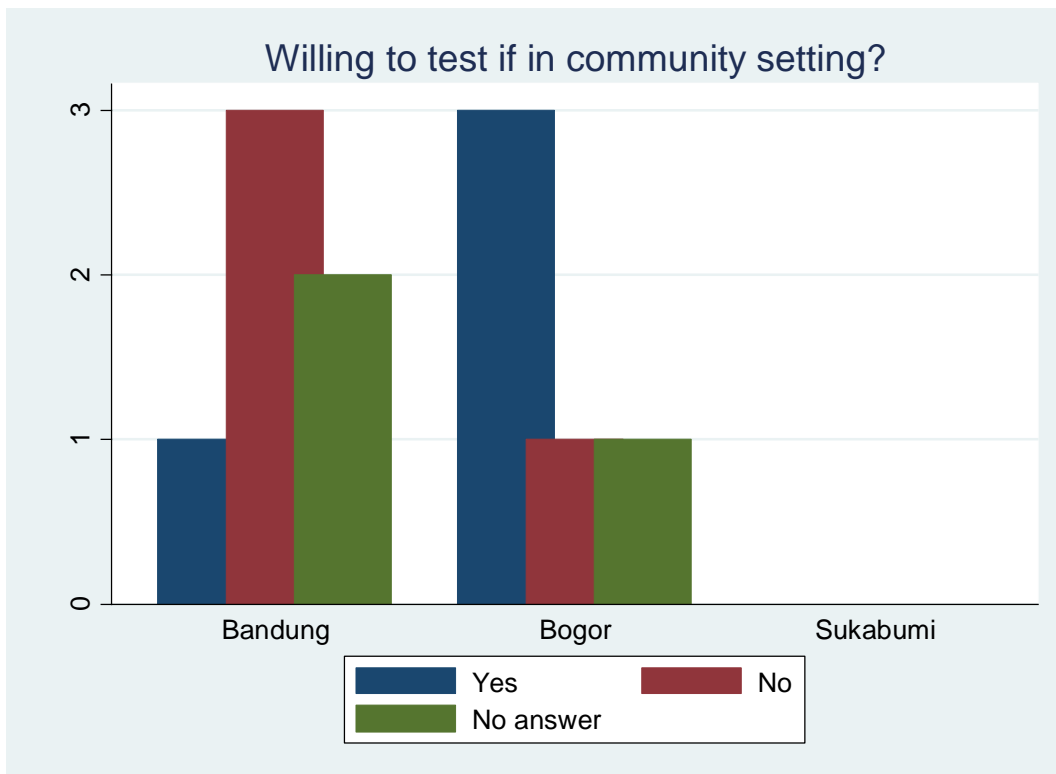




Table 72. Test in last 12 months?

City	Yes	No	No answer
Bandung	19 (30)	44 (70)	-
Bogor	41 (36)	74 (64)	-
Sukabumi	16 (64)	9 (36)	-

Figure 67. Test in last 12 months

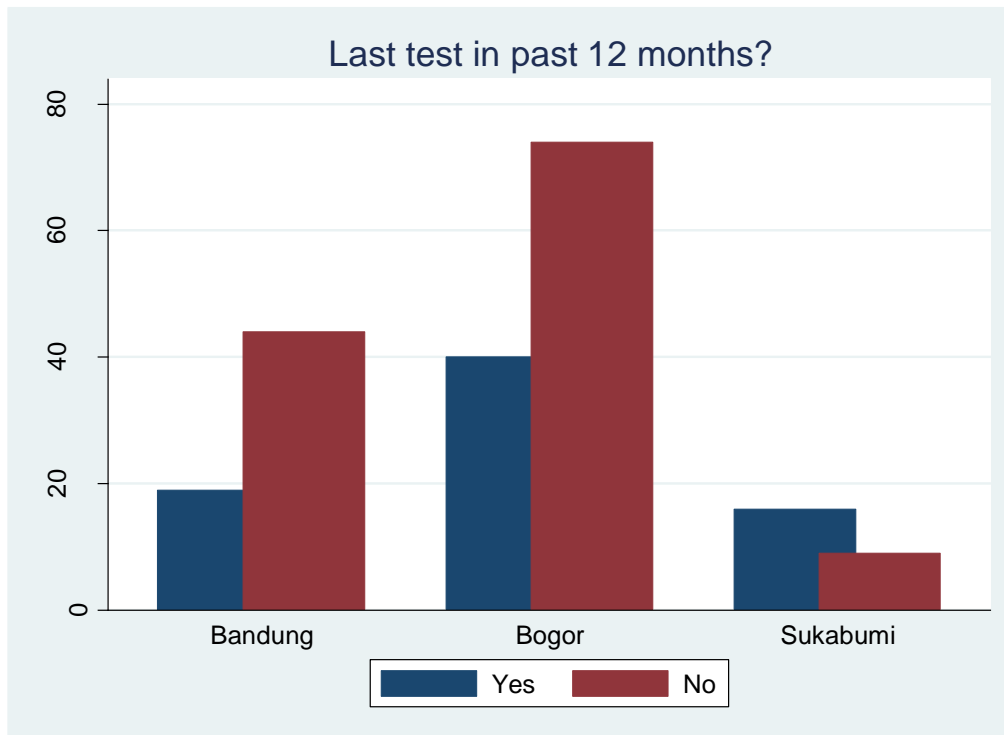


Table 73. Was last test rapid test?

City	Yes	No	No answer
Bandung	46 (74)	16 (26)	-
Bogor	92 (81)	12 (18)	1 (1)
Sukabumi	22 (88)	2 (8)	1 (4)

Figure 68. Last test rapid?

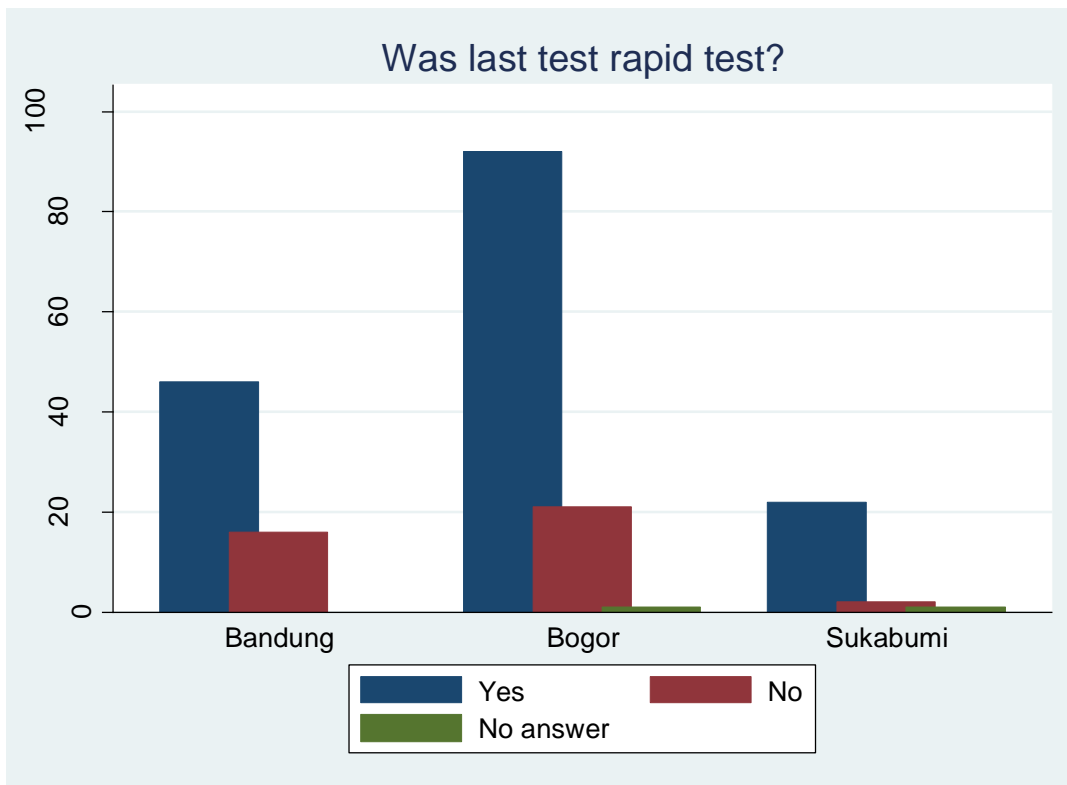


Table 74. Tested in clinic or community?

City	At a clinic	In the community	Other
Bandung	61 (98)	1 (1)	1 (1)
Bogor	96 (84)	18 (16)	-
Sukabumi	25 (100)	-	-

Figure 69. Setting of last test

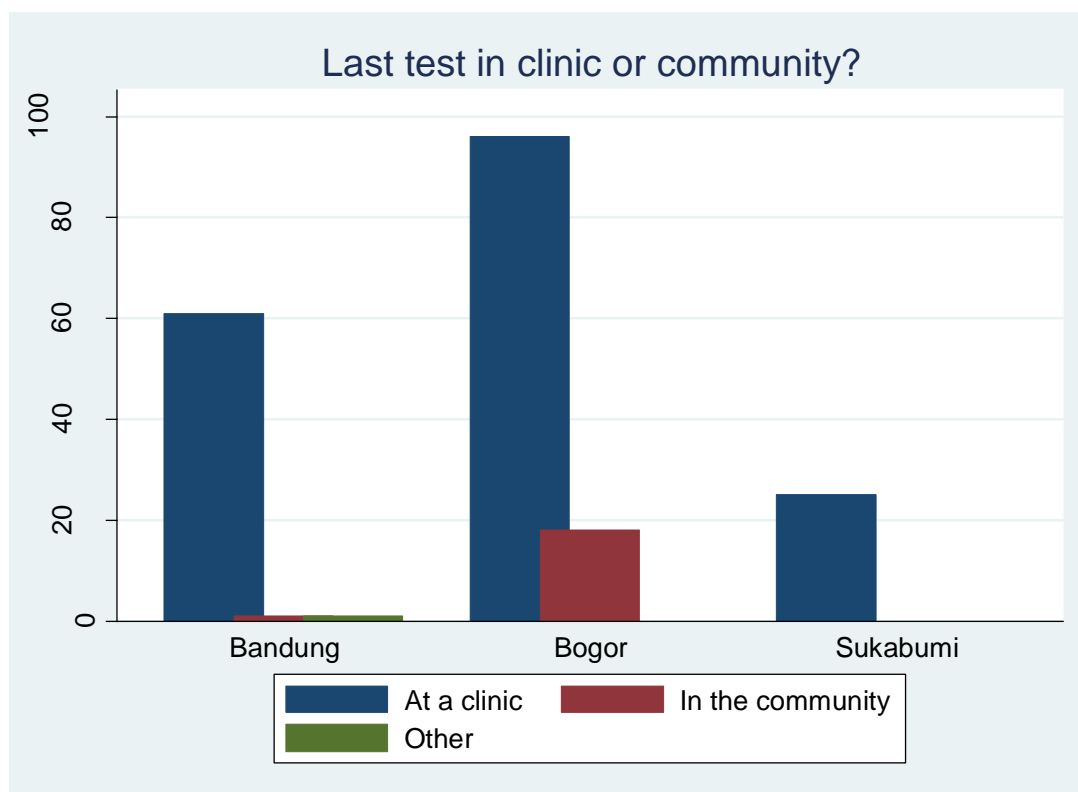


Table 75. Last test result obtained?

City	Yes	No	Waiting for them	No answer
Bandung	61 (97)	2 (3)	-	-
Bogor	112 (98)	2 (2)	-	-
Sukabumi	25 (100)	-	-	-

Figure 70. Last test result obtained?

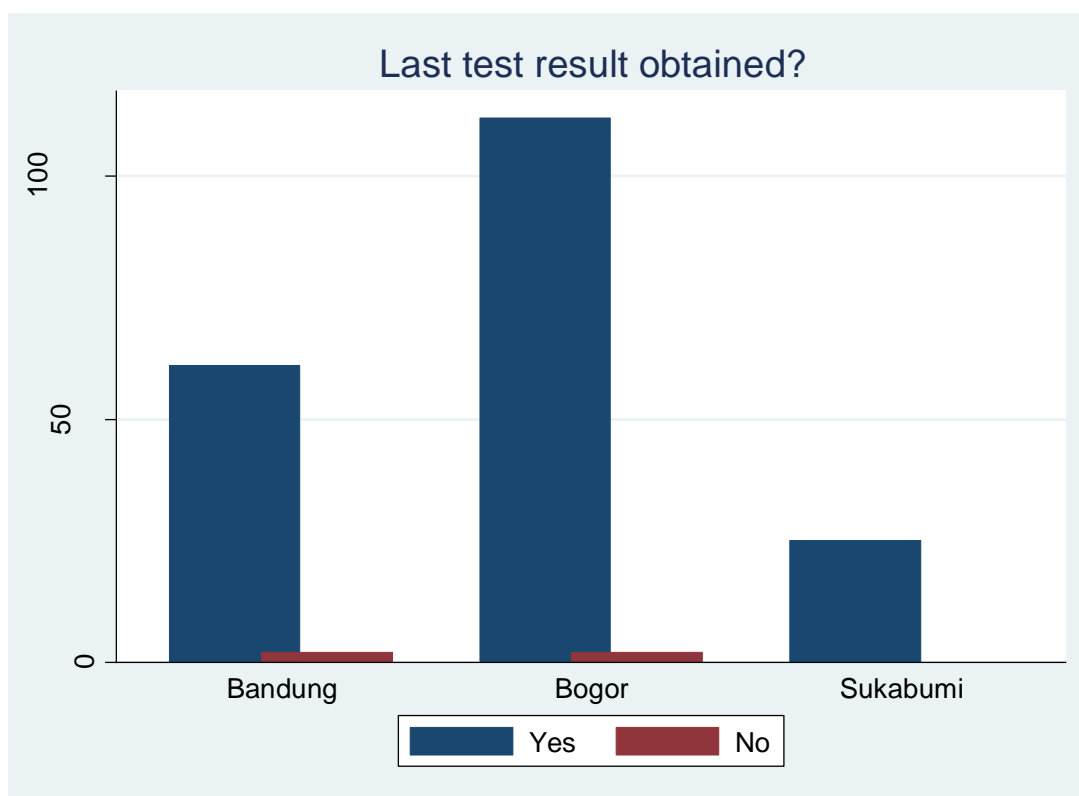


Table 76. Willing to share HIV status?

City	Yes, positive	Yes, negative	No	No answer
Bandung	44 (70)	15 (24)	2 (3)	2 (3)
Bogor	57 (50)	53 (46)	2 (2)	2 (2)
Sukabumi	19 (76)	6 (24)	-	-

Figure 71. HIV status

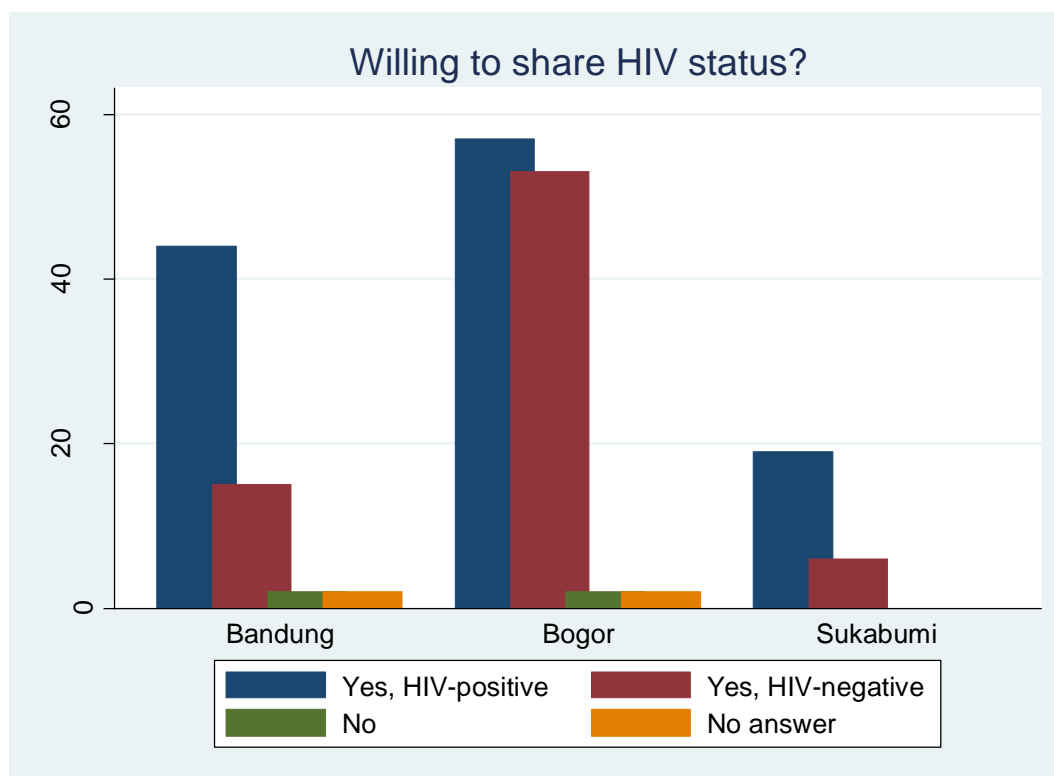


Table 77. Receipt of antiretroviral

City	Yes	No	No answer
Bandung	41 (93)	3 (7)	-
Bogor	48 (84)	9 (16)	-
Sukabumi	18 (95)	1 (5)	-

Figure 72. Receipt of antiretroviral

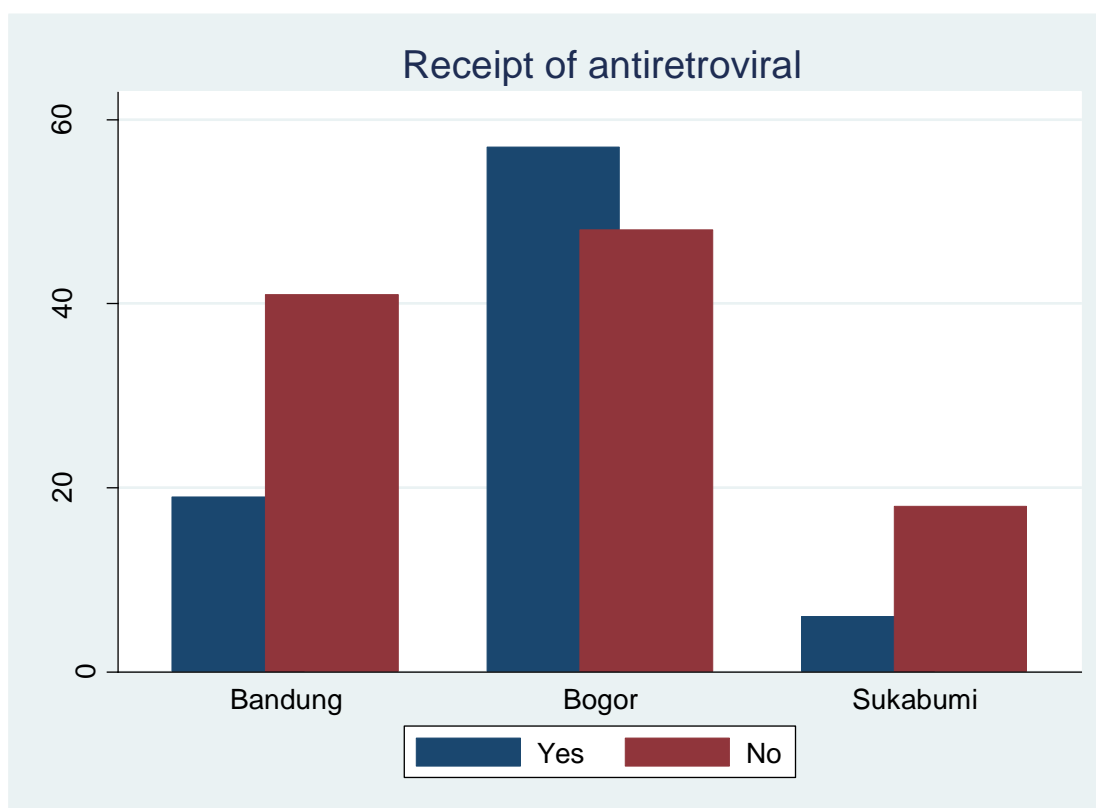
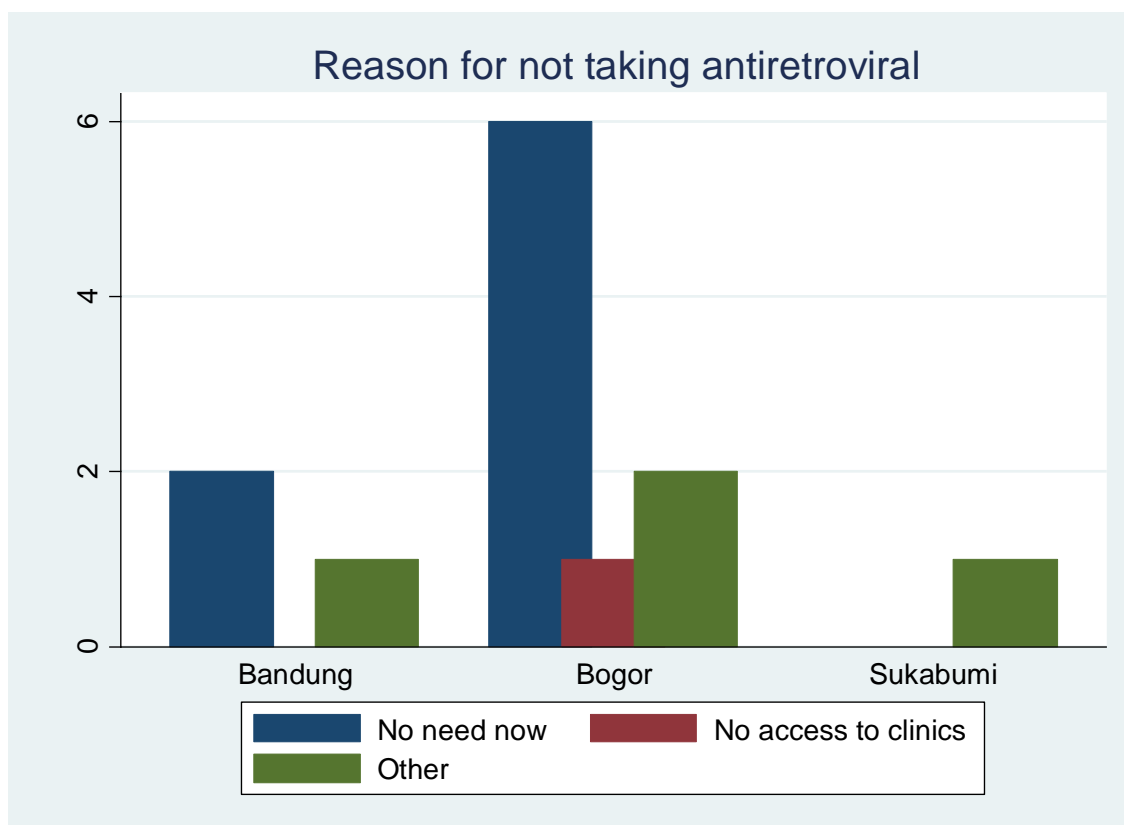


Table 78. Reason for not taking antiretroviral

City	Don't need it yet	No access to ART clinics	Not able to cover costs	Other	No answer
Bandung	2 (67)	-	-	1 (33)	-
Bogor	6 (67)	1 (11)	-	2 (22)	-
Sukabumi	-	-	-	1 (100)	-

Figure 73. Reason for not taking antiretroviral



7. Services provided & satisfaction

Table 79. Identify as client in CAHR programme

City	Yes	No	No answer
Bandung	66 (96)	3 (4)	-
Bogor	113 (93)	7 (6)	1 (1)
Sukabumi	26 (100)	-	-

Figure 74. Identify as client of CAHR programme

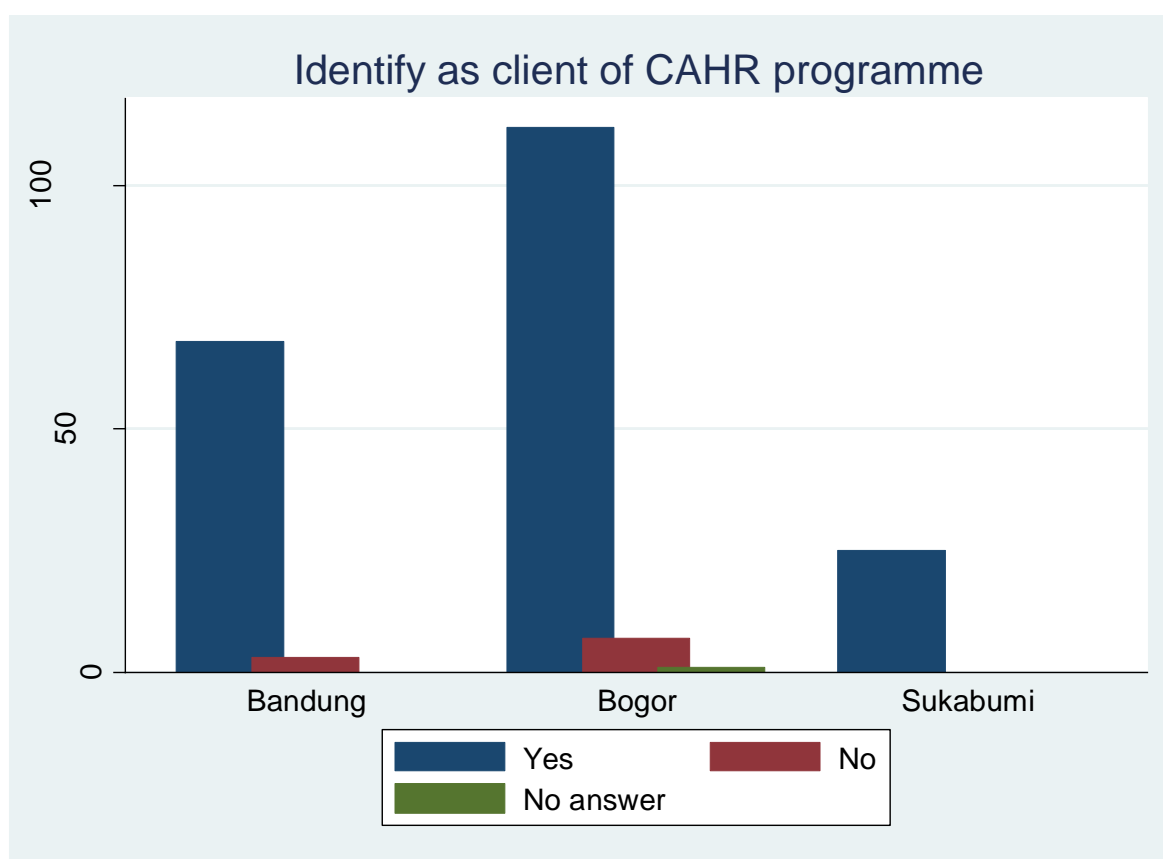




Table 80. Care receipt in past 12 months

City	Yes	No
Bandung	66 (96)	3 (4)
Bogor	120 (99)	1 (1)
Sukabumi	26 (100)	-

Figure 75. Receipt of care in last 12 months

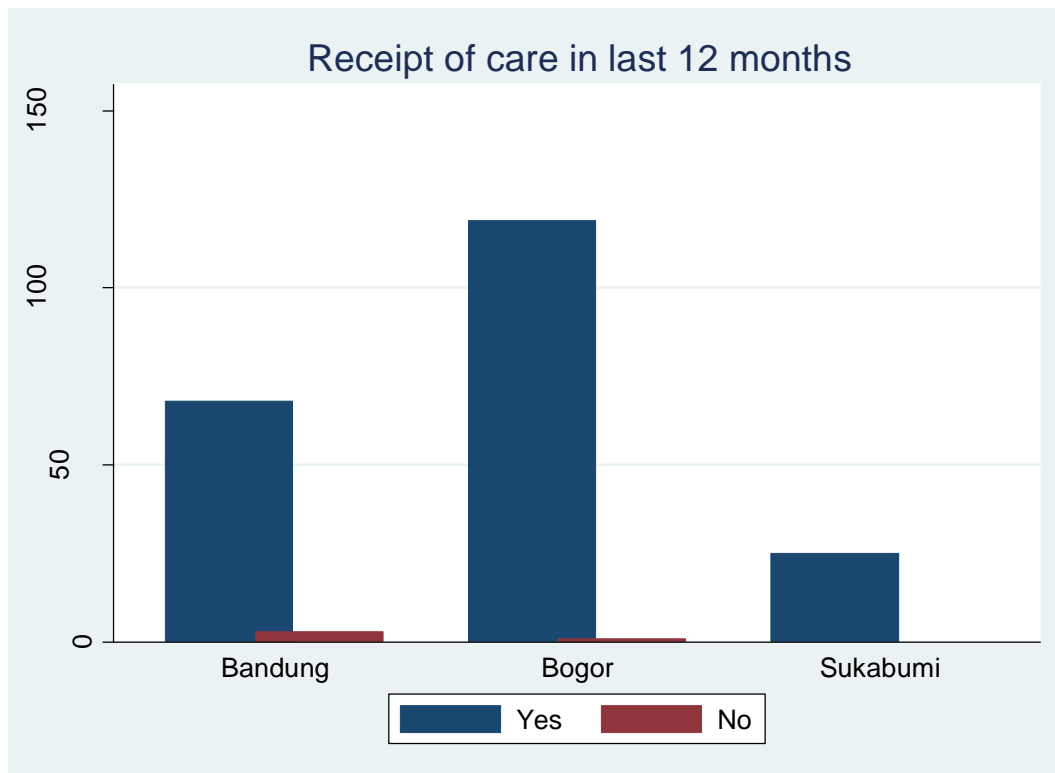


Table 81. Frequency of receipt

City	Once/twice	3-5 times	6-11 times	Once a month	2-3x a month	Once a week	>2x a week
Bandung	18 (27)	4 (6)	7 (10)	18 (27)	9 (13)	7 (10)	3 (4)
Bogor	13 (10)	17 (14)	23 (19)	9 (8)	30 (25)	8 (7)	20 (17)
Sukabumi	-	-	-	2 (8)	2 (8)	1 (4)	20 (80)

Figure 76. Frequency of care receipt

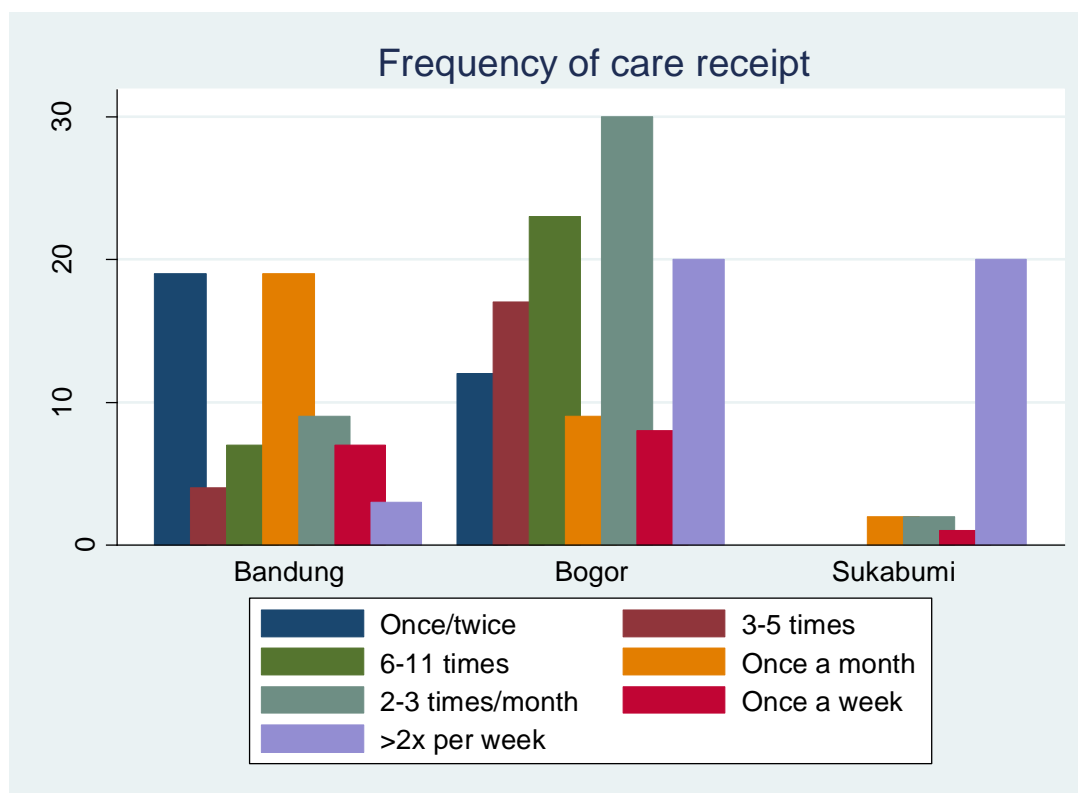
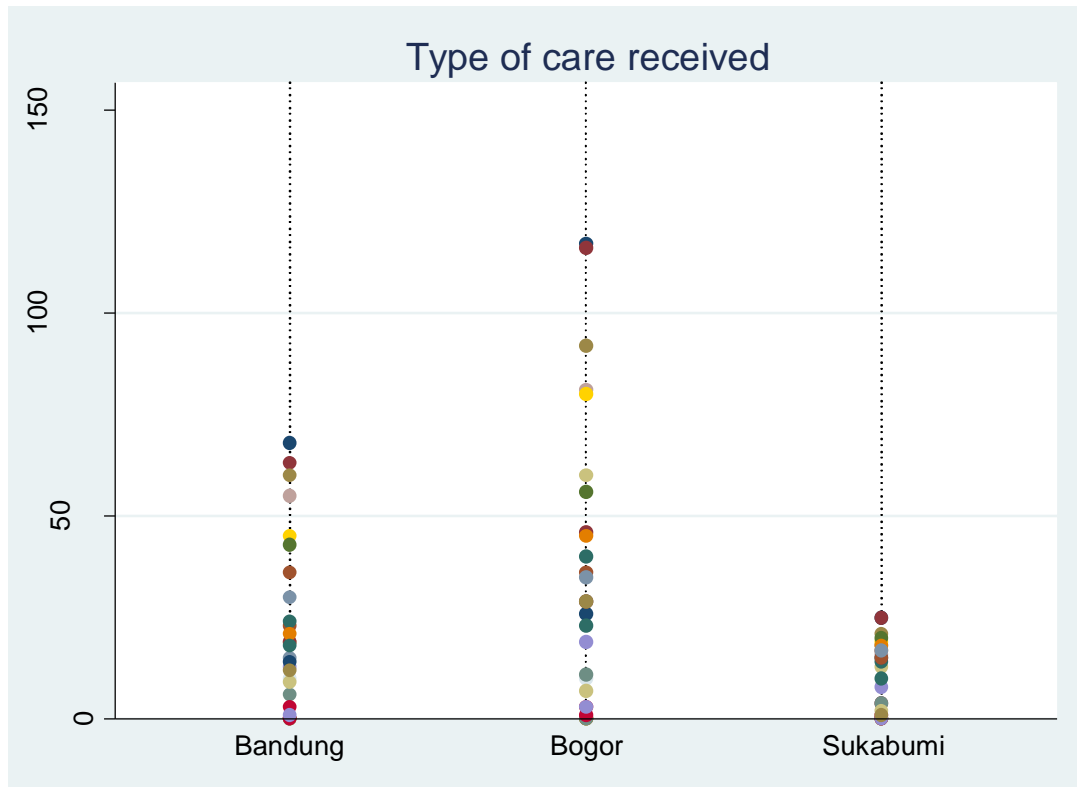


Table 82. Type of care received

Service received	Bandung	Bogor	Sukabumi
Needles/syringes	68 (99)	117 (98)	26 (100)
Alcohol swabs	63 (88)	116 (97)	26 (100)
Injecting water	-	-	-
Cooker/spoons	-	-	-
Cotton balls	-	-	-
Naloxone	-	1 (1)	-
OST access/adherence	13 (18)	19 (16)	8 (32)
Access to other treatment	19 (27)	60 (50)	13 (50)
HIV testing/counselling	23 (32)	36 (30)	17 (68)
Access to antiretroviral	15 (21)	29 (24)	18 (71)
STI care	24 (34)	40 (33)	14 (56)
Condoms	60 (84)	92 (77)	21 (84)
Lubricants	55 (77)	81 (67)	16 (64)
IEC on safer injecting	46 (65)	84 (70)	21 (84)
IEC on safer sex	45 (63)	80 (67)	19 (75)
Viral hepatitis care	10 (14)	10 (8)	4 (16)
TB care	14 (20)	26 (22)	15 (60)
Shelter & basic services	19 (27)	46 (38)	4 (16)
Basic health services	43 (61)	56 (47)	20 (79)
Overdose prevention	21 (30)	45 (37)	18 (71)
PMTCT	6 (8)	11 (9)	4 (16)
Family planning	3 (4)	3 (3)	1 (4)
Safe abortion	1 (1)	3 (3)	-
Maternal care	9 (13)	7 (6)	2 (8)
Home-based care	36 (51)	29 (24)	15 (60)
Family support	30 (42)	35 (29)	17 (68)
Justice/legal services	18 (25)	23 (19)	10 (40)
Economic strengthening	12 (17)	29 (24)	1 (4)

Figure 77. Type of care received



- |                         |                                    |
|-------------------------|------------------------------------|
| Needles/syringes        | Alcohol swabs                      |
| Injectable water        | Cookers/spoons                     |
| Cotton balls            | Naloxone                           |
| OST access/adherence    | Access to other drug treatment     |
| HIV testing/counselling | Access/adherence to antiretroviral |
| STI care                | Condoms                            |
| Lubricant               | IEC on safer injecting             |
| IEC on safer sex        | Viral hepatitis care               |
| TB care                 | Shelter & basic services           |
| Basic health care       | Overdose prevention                |
| PMTCT                   | Family planning                    |
| Safer abortion          | Maternal care                      |
| Home-based care         | Family support                     |
| Justice/legal services  |                                    |

Table 83. Rating of service quality

Service received	Very unsatisfied	Average quality	Very satisfied	No answer
Needles/syringes	2	32	176	-
Alcohol swabs	3	44	132	-
Injecting water	-	-	-	-
Cooker/spoons	-	-	-	-
Cotton balls	-	-	-	-
Naloxone	-	-	-	1
OST access/adherence	1	9	29	1
Access to other treatment	1	27	62	2
HIV testing/counselling	-	16	58	1
Access to antiretroviral	1	16	43	1
STI care	1	29	49	-
Condoms	4	60	108	1
Lubricants	6	64	79	-
IEC on safer injecting	2	37	110	2
IEC on safer sex	-	43	93	2
Viral hepatitis care	-	12	11	-
TB care	-	16	37	1
Shelter & basic services	-	11	58	-
Basic health services	1	39	75	1
Overdose prevention	1	18	63	1
PMTCT	-	8	11	-
Family planning	-	4	3	-
Safe abortion	-	3	2	-
Maternal care	-	3	15	-
Home-based care	1	11	68	-
Family support	-	22	58	1
Justice/legal services	1	13	33	-
Economic strengthening	-	15	26	1

Figure 78. Rating of service quality



Table 84. Service needs

Service received	Not needed	Needed sometimes	Very much needed	No answer
Needles/syringes				
Alcohol swabs	-	51	155	1
Injecting water	2	56	145	1
Cooker/spoons	54	42	71	1
Cotton balls	115	14	26	1
Naloxone	113	16	27	1
OST access/adherence	40	13	126	3
Access to other treatment	54	33	87	2
HIV testing/counselling	19	40	131	3
Access to antiretroviral	37	40	101	2
STI care	61	12	102	3
Condoms	41	39	100	3
Lubricants	32	53	108	2
IEC on safer injecting	74	38	78	2
IEC on safer sex	19	42	120	2
Viral hepatitis care	23	43	114	3
TB care	11	23	146	2
Shelter & basic services	21	31	123	2
Basic health services	33	36	100	3
Overdose prevention	13	51	114	2
PMTCT	9	41	136	3
Family planning	59	32	77	5
Safe abortion	86	26	51	3
Maternal care	102	29	33	3
Home-based care	60	29	77	2
Family support	45	21	103	4
Justice/legal services	13	22	154	2
Economic strengthening	17	21	152	2

Figure 79. Extent of service need

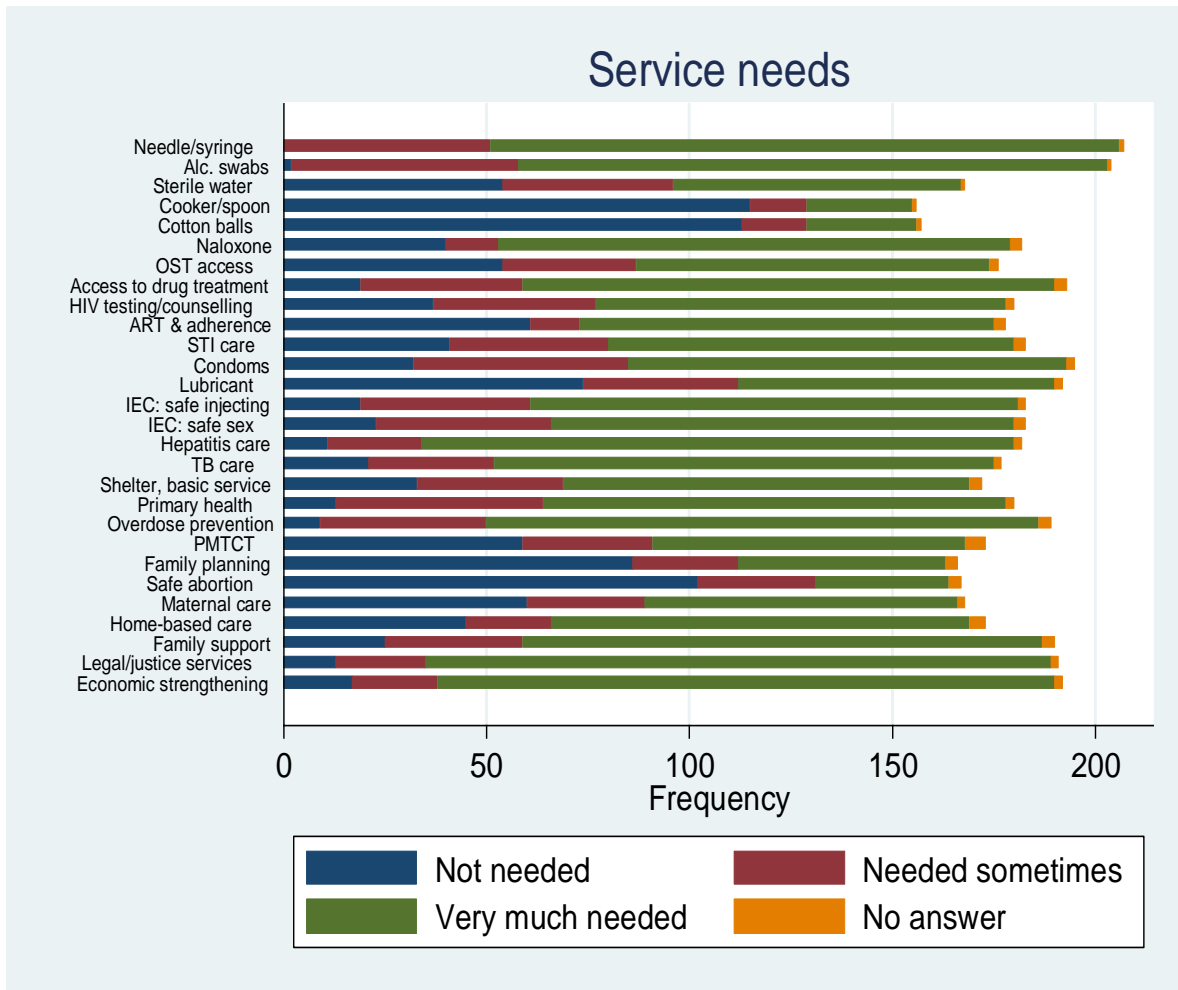




Table 85. Key factor in service delivery

Service received	Bandung	Bogor	Sukabumi
Accessibility	64 (89)	98 (81)	16 (64)
Staff friendliness	57 (80)	88 (73)	21 (84)
Staff professionalism	65 (92)	89 (74)	18 (71)
Range of services available	55 (74)	98 (81)	22 (88)
Confidentiality	68 (95)	107 (89)	17 (68)
Cost of service/fee	48 (67)	70 (58)	15 (60)
Availability of peer support	46 (65)	73 (61)	9 (36)
Other	4 (5)	3 (3)	-

Figure 80. Key factor in service delivery

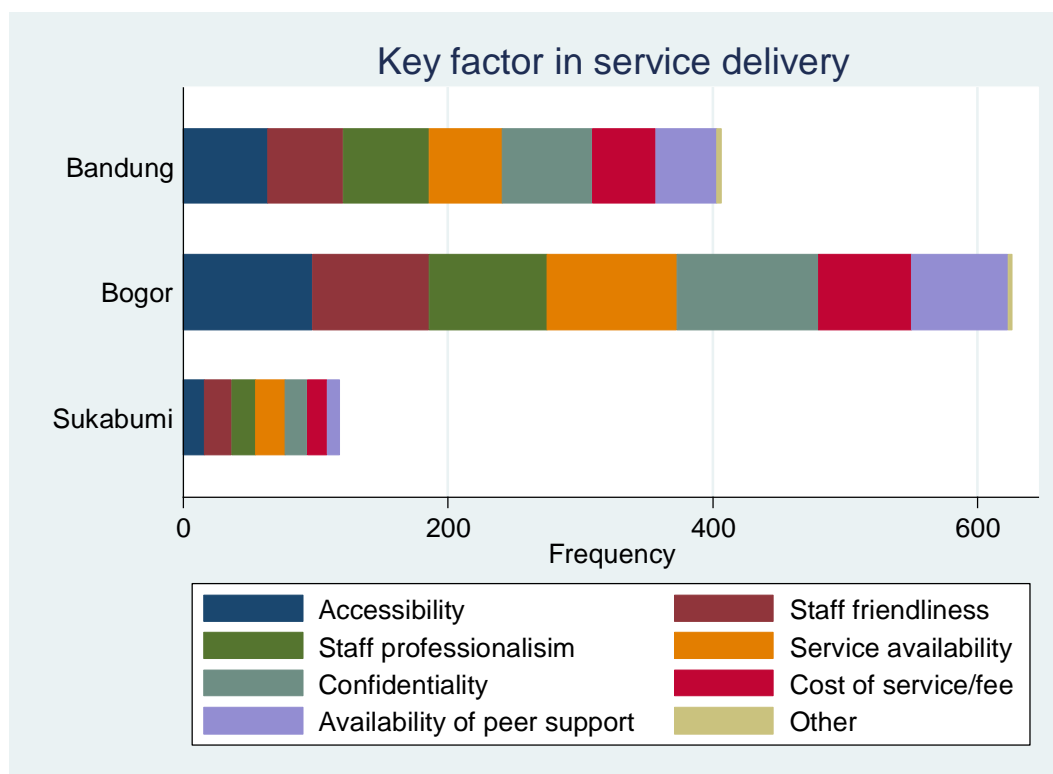


Table 86. Perceived use of alcohol swabs

City	Remove traces of blood	Disinfectant	Soften the skin
Bandung	26 (38)	40 (58)	3 (4)
Bogor	71 (58)	48 (40)	2 (2)
Sukabumi	19 (72)	7 (28)	-

Figure 81. Perceived use of alcohol swabs

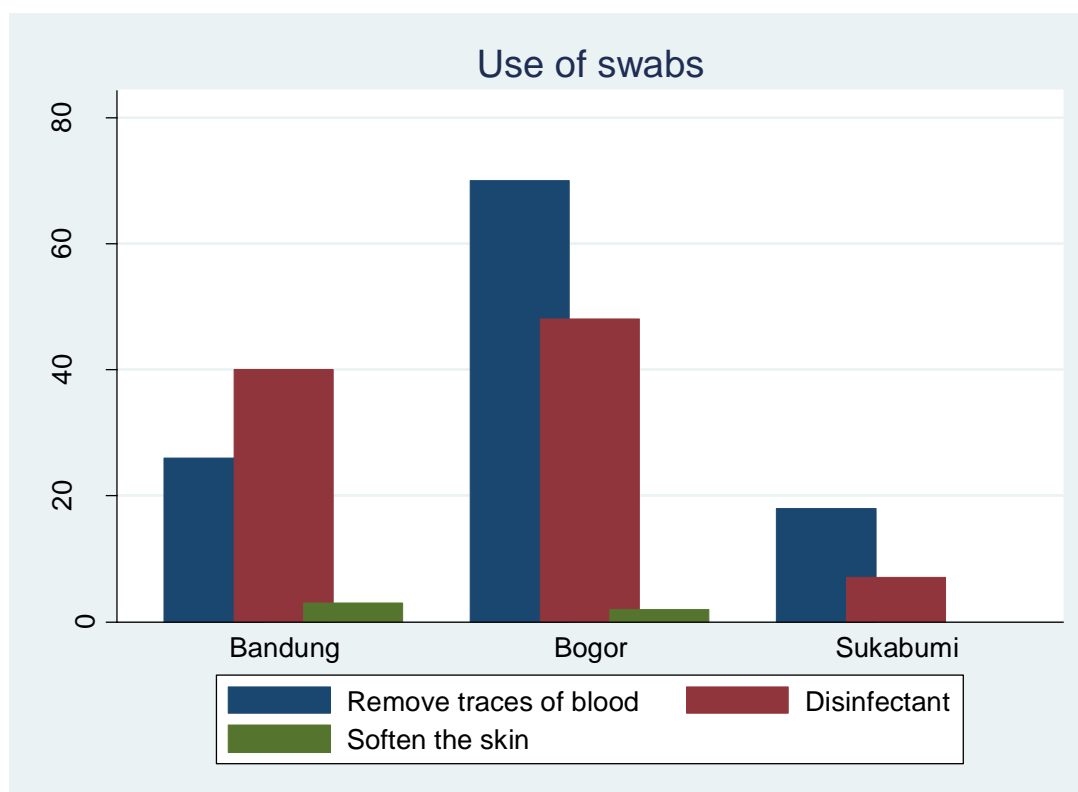
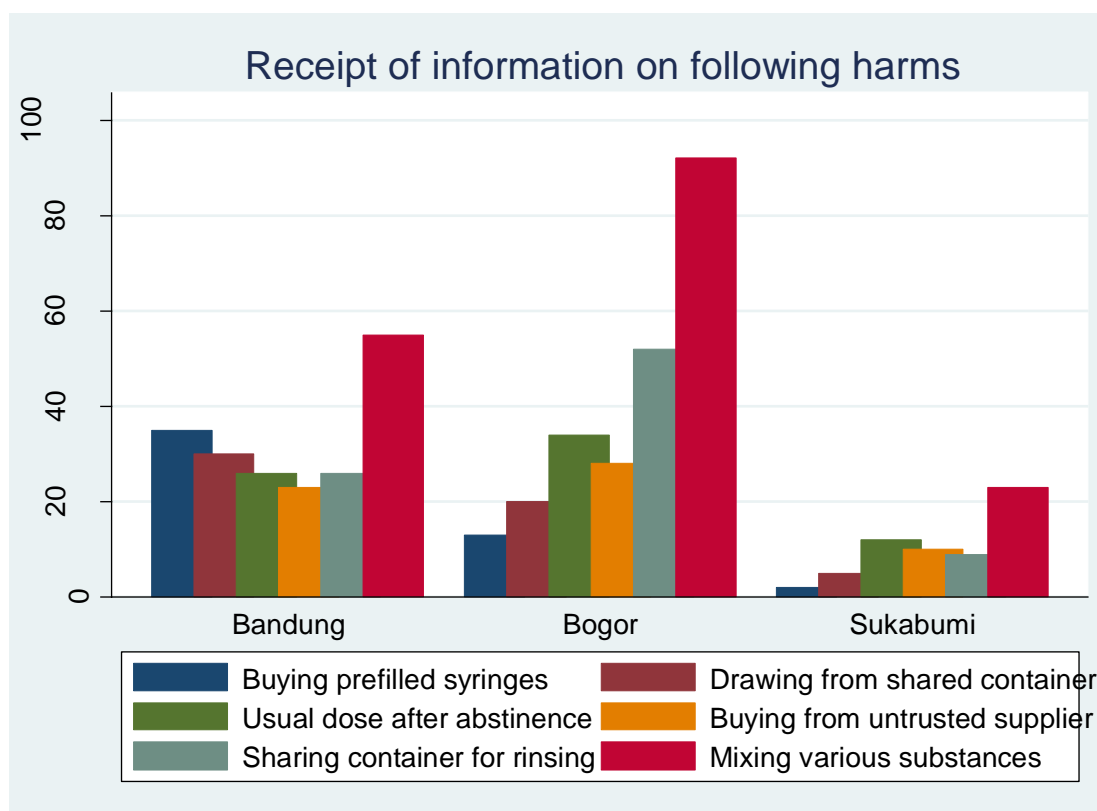


Table 87. Receipt of information on risks

Service received	Bandung	Bogor	Sukabumi
Buying drug-prefilled syringe	35 (49)	13 (11)	2 (8)
Drawing drug from single container	30 (42)	20 (17)	5 (20)
Taking usual dose after abstinence	26 (36)	34 (28)	12 (48)
Buying from untrusted suppliers	23 (32)	28 (33)	10 (40)
Sharing container for preparing/rinsing	26 (37)	52 (43)	9 (36)
Mixing various substances	55 (77)	92 (76)	23 (92)

Figure 82. Receipt of information on harms



## 8. Wellbeing & quality of life

Table 88. State of fulfilment: basic needs

City	Fully met	Somewhat met	Not met
Bandung	36 (51)	31 (44)	4 (6)
Bogor	49 (41)	67 (56)	3 (3)
Sukabumi	6 (24)	17 (68)	2 (8)

Figure 83. State of fulfilment: basic needs

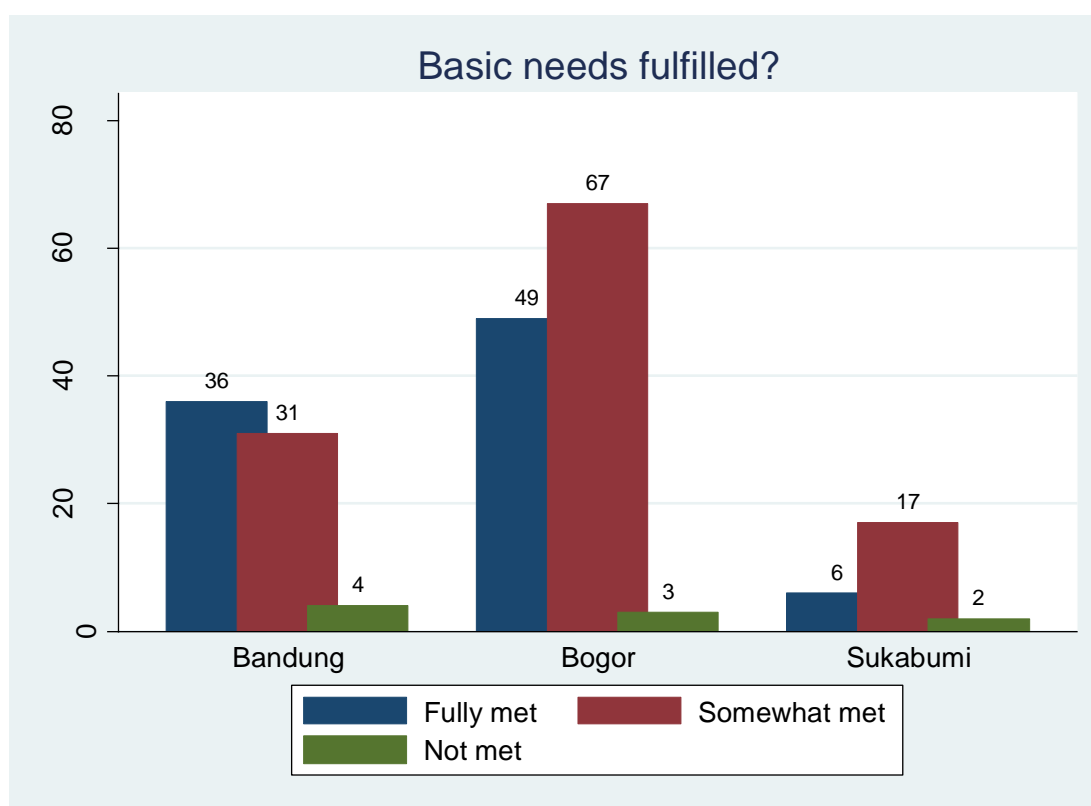


Table 89. Sense of security

City	Constantly safe & secure	Somewhat safe & secure	Very vulnerable
Bandung	27 (39)	41 (59)	3 (3)
Bogor	45 (38)	70 (59)	5 (3)
Sukabumi	2 (8)	23 (92)	-

Figure 84. Sense of security

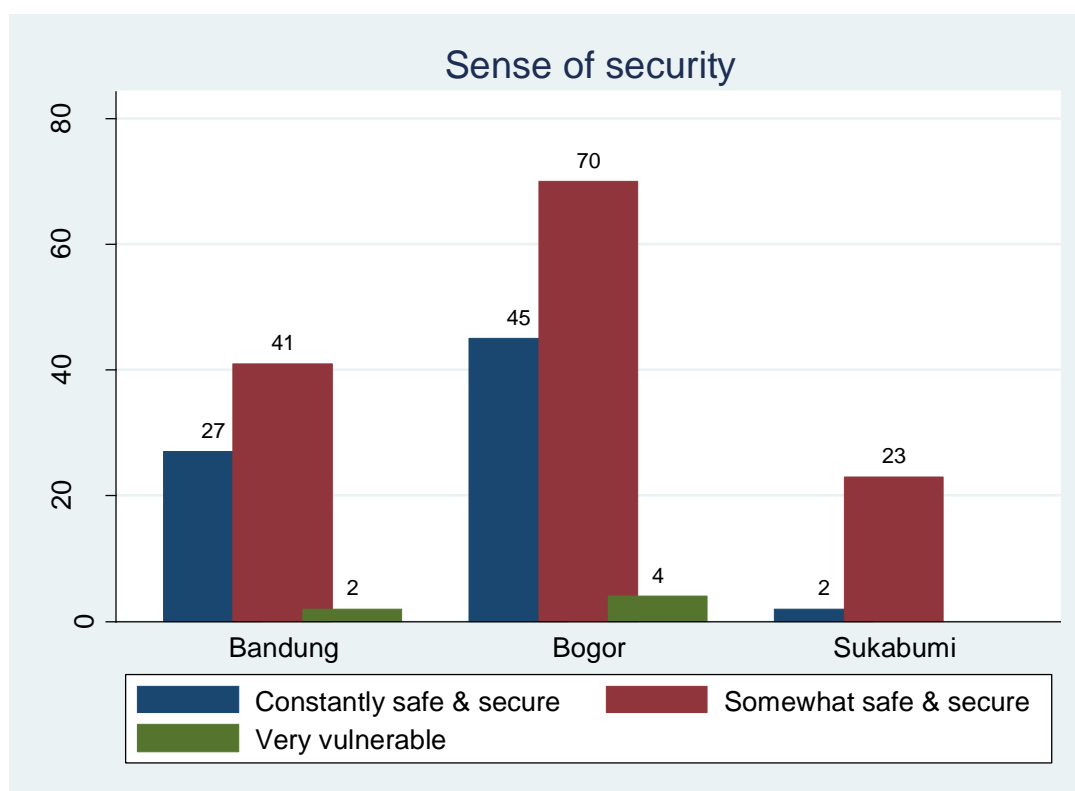


Table 90. State of pain and discomfort

City	No pain/discomfort	Moderate pain/discomfort	Extreme pain/discomfort
Bandung	24 (34)	45 (64)	1 (1)
Bogor	38 (32)	76 (63)	7 (5)
Sukabumi	1 (4)	23 (92)	1 (4)

Figure 85. State of pain and discomfort

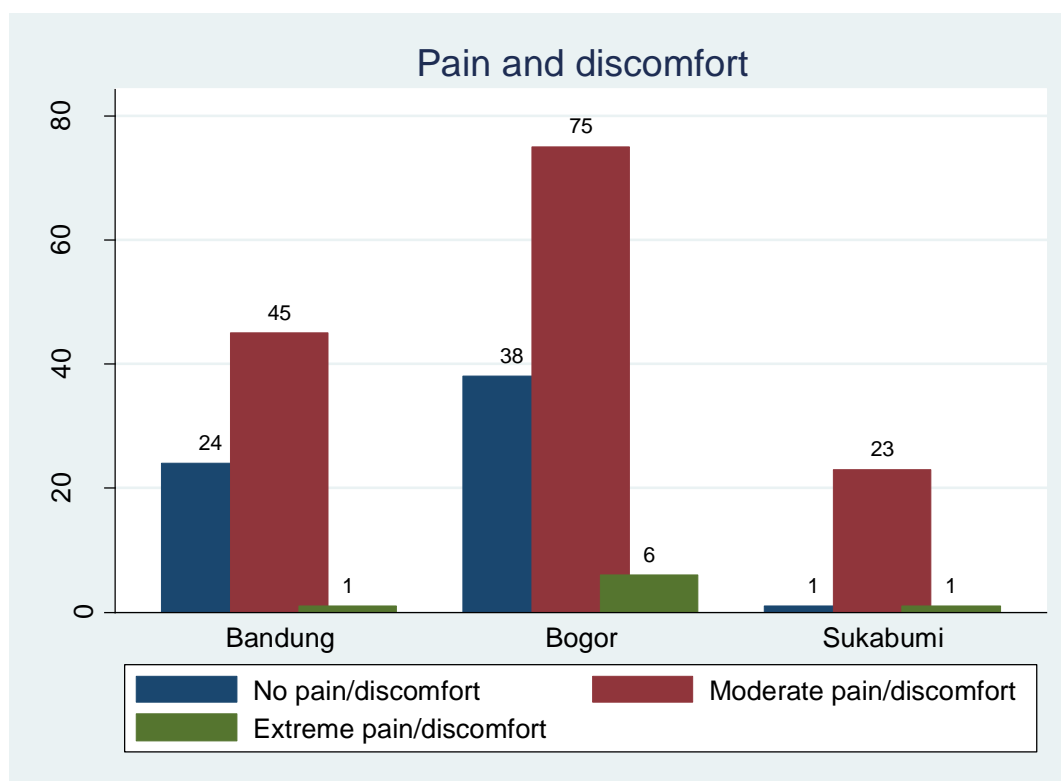


Table 91. Anxiety and depression

City	Neither anxious nor depressed	Moderately anxious/depressed	Extremely anxious/depressed	No answer
Bandung	30 (42)	34 (49)	5 (8)	-
Bogor	54 (45)	52 (44)	11 (9)	2 (2)
Sukabumi	-	25 (99)	1 (1)	-

Figure 86. Anxiety and depression

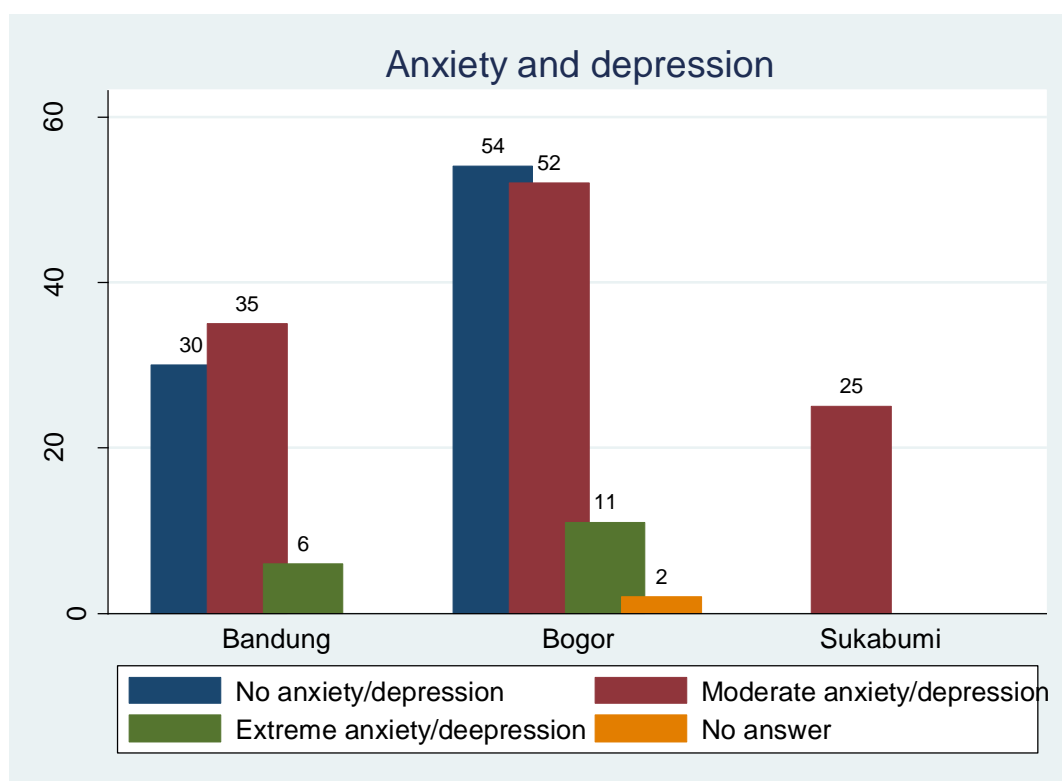


Table 92. Stigma and discrimination

City	Not at all	Stigmatized to a degree	Highly stigmatized
Bandung	32 (46)	33 (48)	4 (6)
Bogor	54 (45)	51 (43)	14 (12)
Sukabumi	4 (12)	21 (83)	2 (4)

Figure 87. Stigma and discrimination

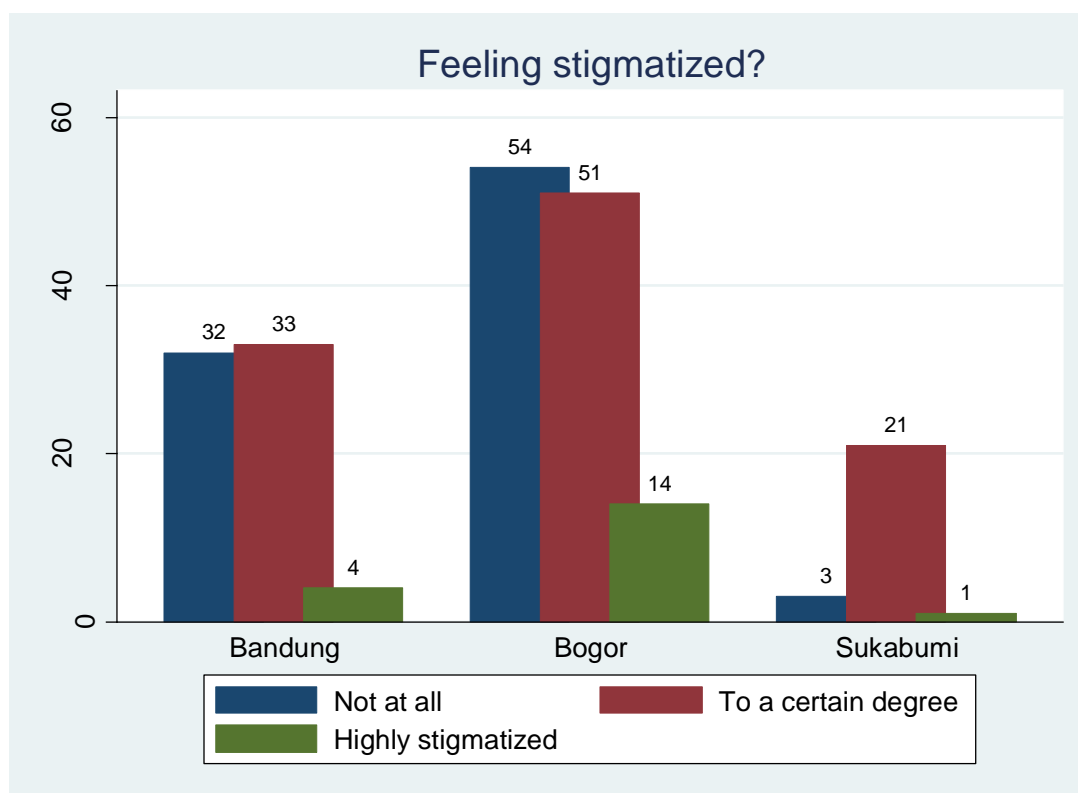




Table 93. Access to care

City	Fully accessible	Somewhat accessible	Accessible but negative staff attitude	Not accessible
Bandung	29 (42)	33 (49)	7 (9)	-
Bogor	33 (28)	72 (61)	8 (7)	6 (5)
Sukabumi	2 (4)	8 (32)	16 (64)	-

Figure 88. Access to care

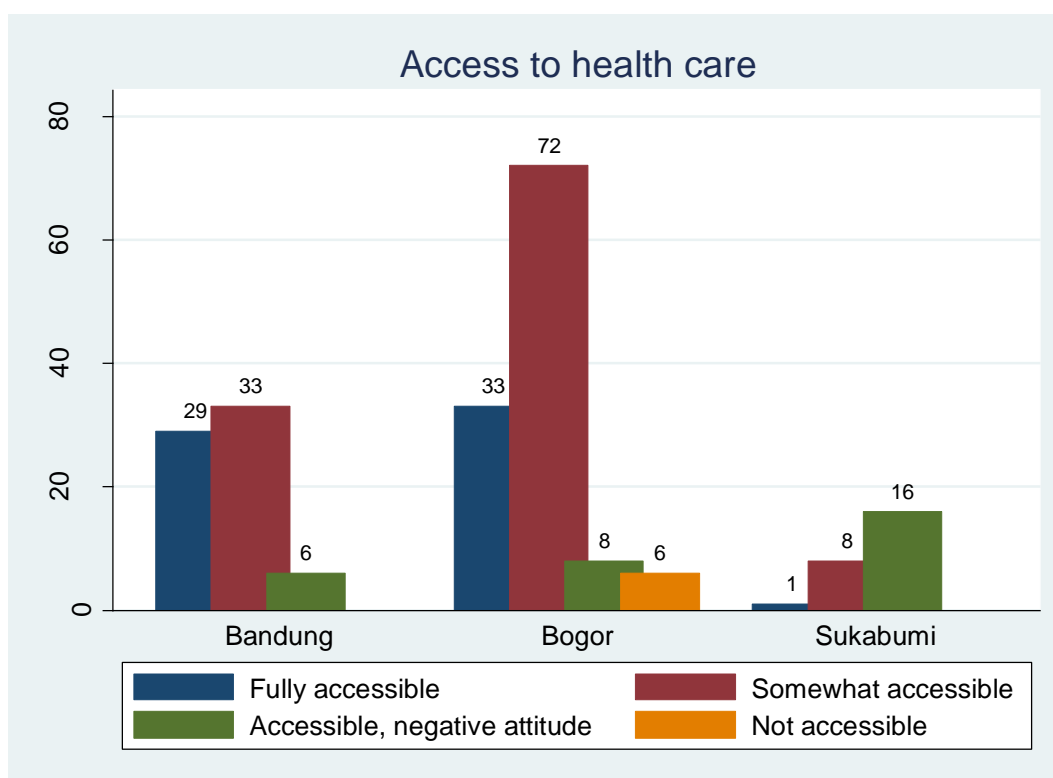


Table 94. Access to reproductive care (female)

City	Fully accessible	Somewhat accessible	Accessible but negative staff attitude	Not accessible
Bandung	1 (50)	1 (50)	-	-
Bogor	4 (29)	10 (71)	-	-
Sukabumi	1 (100)	-	-	-

Figure 89. Access to reproductive care (female)

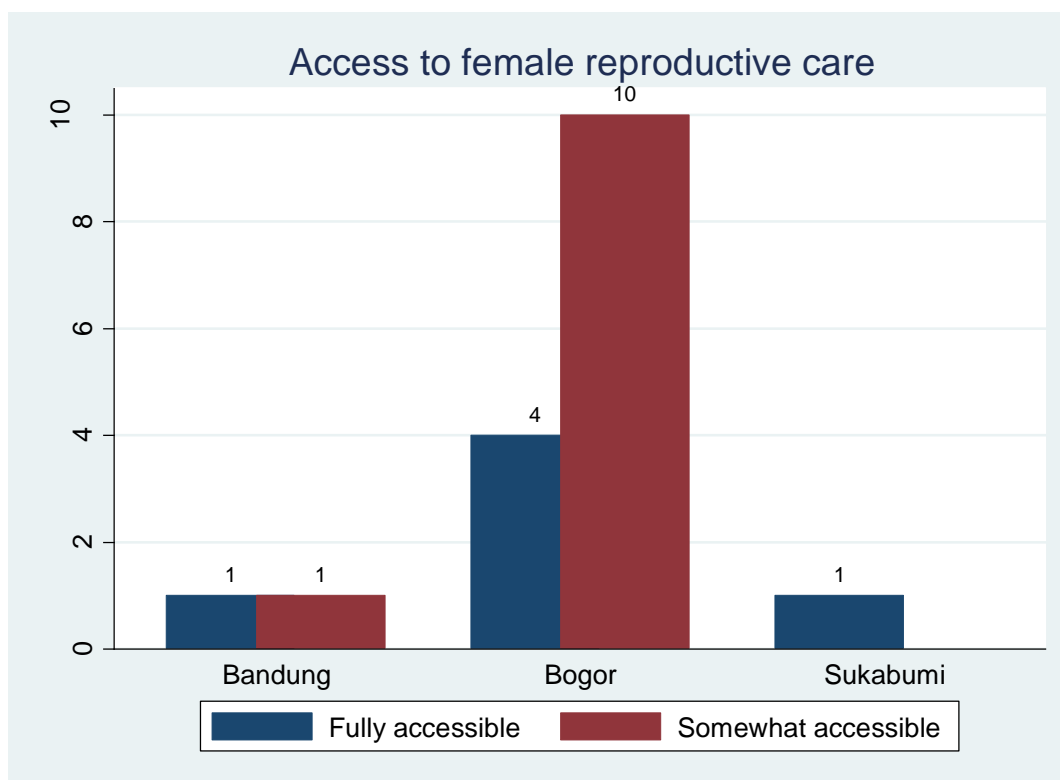


Table 95. State of economic wellbeing

City	Fully satisfied	Satisfied	Somewhat satisfied	Not satisfied	Strongly dissatisfied
Bandung	-	29 (43)	38 (54)	2 (3)	-
Bogor	3 (3)	30 (25)	64 (53)	23 (18)	1 (1)
Sukabumi	-	-	22 (84)	4	-

Figure 90. State of economic wellbeing

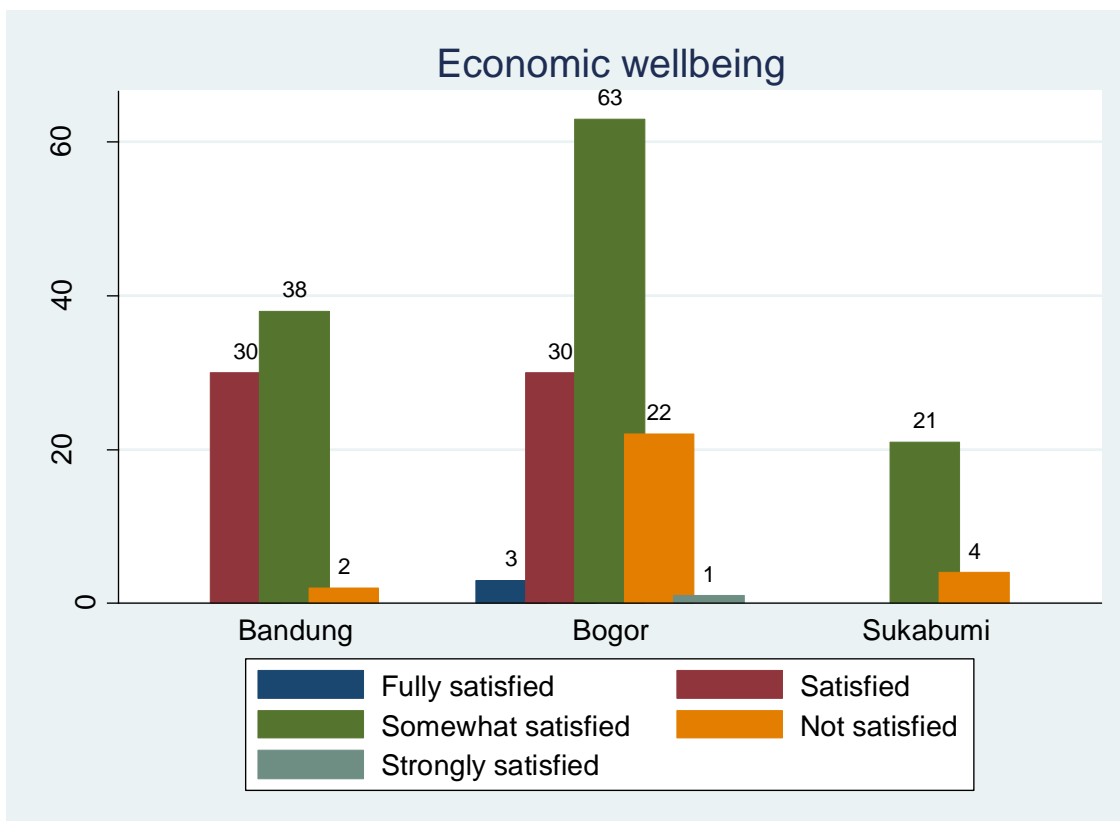


Table 96. Attitude of law enforcement

City	No experience	Experience some	Experience extreme
Bandung	33 (47)	33 (47)	4 (6)
Bogor	38 (31)	79 (66)	4 (3)
Sukabumi	-	25 (96)	1 (4)

Figure 91. Attitude of law enforcement

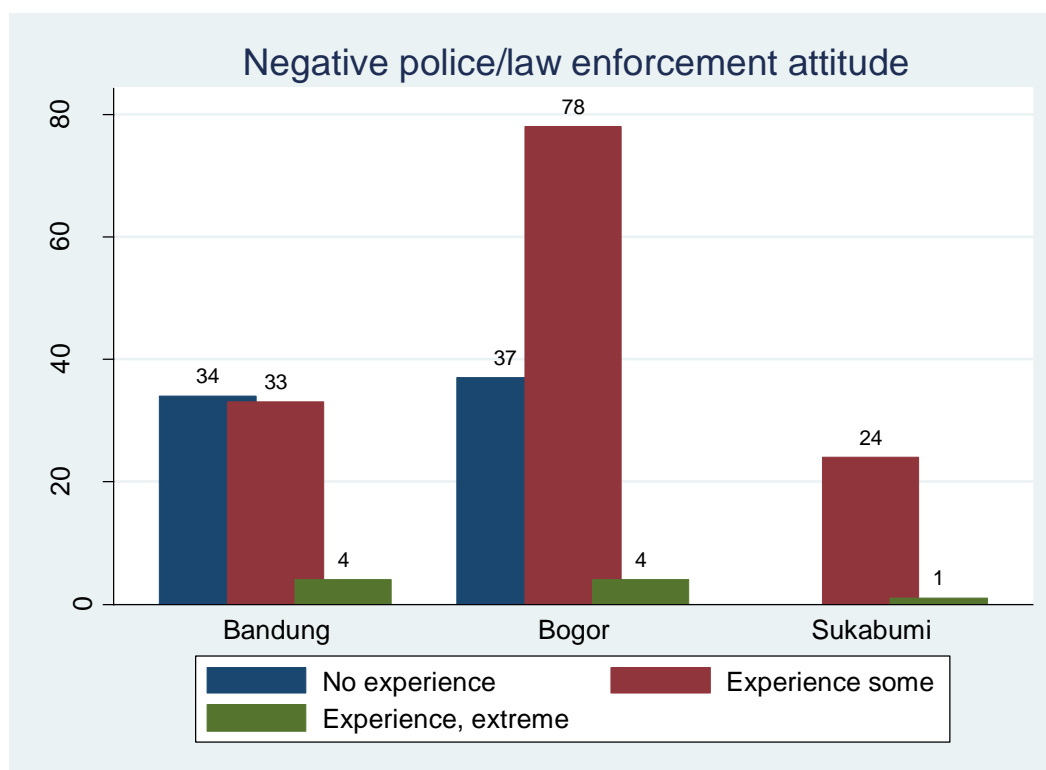


Table 97. Community support

City	High support	Some support	No support	No answer
Bandung	33 (48)	30 (44)	5 (7)	1 (1)
Bogor	59 (49)	52 (43)	9 (7)	1 (1)
Sukabumi	3 (12)	22 (84)	1 (4)	-

Figure 92. Community support

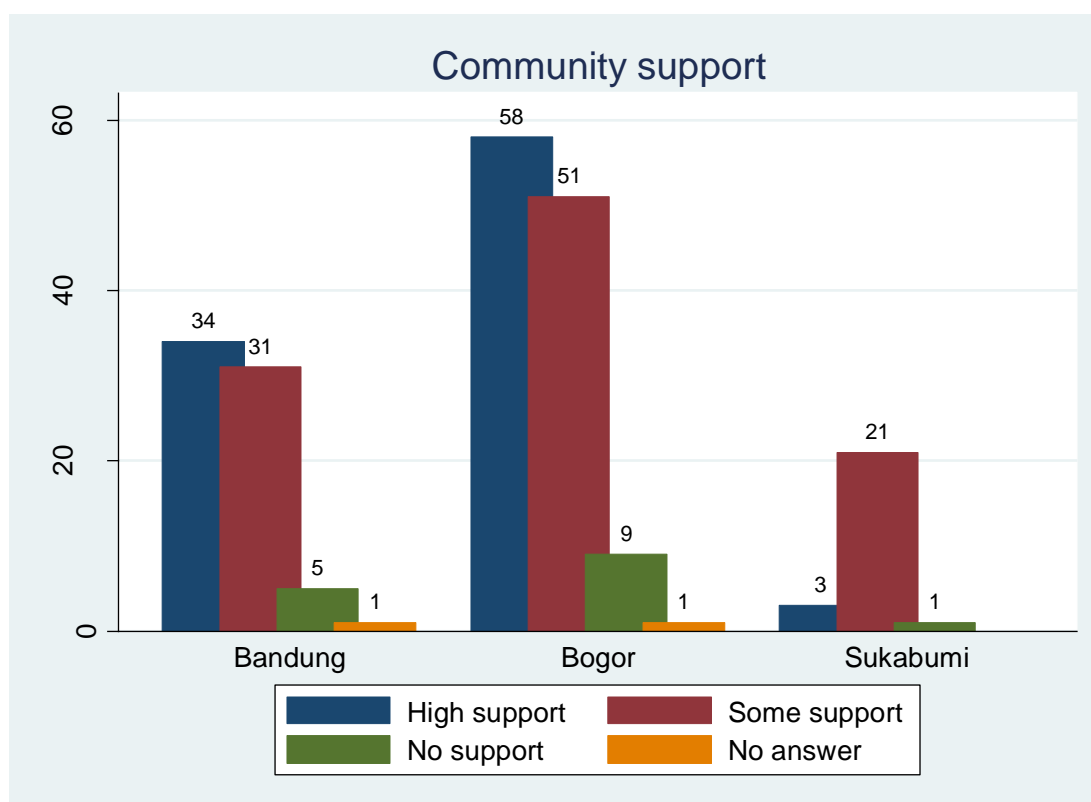


Table 98. Family support

City	Full support	Partial support	No support	Disowned from family
Bandung	42 (61)	25 (37)	1 (1)	1 (1)
Bogor	81 (67)	32 (27)	8 (6)	-
Sukabumi	13 (52)	12 (48)	-	-

Figure 93. Family support

