



## **COMMUNITY ACTION ON HARM REDUCTION (CAHR) PROJECT: END OF PROJECT BASELINE ASSESSMENT FOR MALAYSIA**

*This report presents the results of an assessment study conducted of CAHR project implementation in Malaysia and offers an analysis of the obtained results as well as recommendations for further research agenda and improvements of access to quality harm reduction services.*

**By**

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## **1.0 Abbreviations**

AIDS	Acquired Immune Deficiency Syndrome
ART	Anti-retroviral therapy
CAHR	Community Action on Harm Reduction
DIC	Drop-in Centre
MMT	Methadone Maintenance Therapy
MOH	Ministry of Health, Malaysia
NADA	National Anti-Drug Agency
NSEP	Needle and Syringe Exchange Programme
OST	Opiate Substitution Therapy
PWID	People Who Inject Drugs
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infection
TB	Tuberculosis
WHO	World Health Organization

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### **3.0 Executive summary**

Community Action on Harm Reduction (CAHR) is a project that aims at protecting and promoting the rights of injecting drug users, their partners and children with a wide range of services by fostering an enabling environment for HIV and harm reduction programming in five countries, including Malaysia. The project is supported by International HIV/AIDS Alliance and funded by the Dutch Ministry of Foreign Affairs.

This end of project assessment was conducted among People Who Inject Drugs (PWIDs) examining their drug injecting practices, risky injecting behaviour, relationship with police and law, sexual behaviour knowledge about HIV/AIDS and safe injecting, HIV testing, services received by PWID and satisfaction with the services, factors associated with usage of clean needles and syringes, and their well-being and quality of life.

Face-to-face interviews were conducted with 280 existing and new clients of the CAHR project using a structured close-ended questionnaire. Proportionate stratified sampling and simple random sampling with replacement were used to identify the number of clients for the study in four of the eight CAHR centres in Malaysia and to select the respondents for the interviews, respectively.

The report describes results of the end-line assessment in comparison with data received through the baseline study conducted in 2012 using the same methodology. Generally, there have been some changes between the baseline assessment conducted in 2012 and the present study. There appears to be an increase in the knowledge and awareness about HIV/AIDS and safe injecting practices by the PWIDs although more efforts for harm reduction are still required. There is an increase in the percentage of participants who are now on methadone compared to the earlier study. A number of the CAHR project clients reported that they had been motivated to go on methadone as a result of the information received about it at the centres. Nevertheless, a number of clients requested for more education on the benefits of methadone.

There continues to be a need to ensure all PWID receive adequate care to ensure harm reduction efforts reach to all who are vulnerable in the community, irrespective of gender and ethnicity.

## **4.0 Introduction**

### **4.1 Overview of the CAHR Project<sup>1</sup>**

Community Action on Harm Reduction (CAHR) is an ambitious project spanning five countries (Kenya, China, India, Indonesia, and Malaysia) that will expand coverage to more than 230,000 injecting drug users, their partners and children with a wide range of services (HIV prevention, treatment and care, sexual and reproductive health and other services) by 2014. In addition, CAHR aims at protecting and promoting the rights of these groups by fostering an enabling environment for HIV and harm reduction programming in the five countries.

CAHR's programme goal is that by the end of the project, people who inject drugs (PWIDs), their partners and children are healthier, less marginalized and more engaged in social and community life. This will be achieved through four pillars: increasing access, building capacity, promoting human rights and brokering knowledge.

The Monitoring and Evaluation (M&E) Plan of the Programme follows the structure of CAHR. For each of the four objectives a number of indicators were identified, according to which the progress in achieving the Programme's objectives would be measured. The M&E Plan aims to track the results of the Programme's activities at the level of process/output and outcome indicators. It is also expected that the Programme will contribute to certain changes at the impact level, i.e. changes in incidence and prevalence rates among IDUs. However, corresponding indicators are not part of this M&E Plan but are rather part of national M&E systems within countries. The approach to monitoring and evaluation that was taken in this Programme is the following: any impact-level changes that occur within the targeted countries are not directly attributable to any single programme, but that they are rather the results of joint actions of several projects and programmes that are being implemented in a given country in a given period of time. Following this logic, in no way will CAHR Programme attempt to attribute the positive changes in incidence/prevalence rates in targeted countries solely to its activities, but would rather aim to contribute to their decrease together with other initiatives.

At the same time, in order to capture certain project-specific changes that are anticipated to occur as a result of CAHR implementation in countries, a baseline assessment in Year 1 and

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<sup>1</sup> Baseline Report for Community Action on Harm Reduction (CAHR) project, by Olga Varetska, Vyacheslav Kushakov, and Maryna Braga, 2013.

then end-of project evaluation in Year 4 are envisaged. The goal of both studies is to capture both the outcome indicators listed in the M&E plan and the majority of intermediate outcomes that are expected as a result of CAHR project implementation.

#### **4.2 Assessment objectives of the CAHR project**

The goal of the year end project is to explore a set of key questions related to the effectiveness of CAHR project implementation in Malaysia.

The questions that the baseline survey and end-of-project evaluation attempt to answer are the following:

1. The effectiveness (added-value) of additional wrap around services (additional community-oriented interventions other than the 9 interventions included 'comprehensive package' of HIV and harm reduction endorsed by the World Health Organization) for IDUs and their families;
2. To what extent are services provided demand driven? What are the key factors that make the service attractive / not attractive to the clients?
3. Knowledge / attitudes / behavior of IDUs in relation to HIV/AIDS before and after project implementation;
4. Well-being and quality of life of IDUs before and after project implementation; and
5. Relations with police; compulsory rehabilitation/detoxification centres.

#### **4.3 Status of HIV Epidemic in Malaysia<sup>2</sup>**

Malaysia has a concentrated HIV epidemic with high infection rates at 5% among most-at-risk populations, including people who inject drugs (PWID), female sex workers, men who have sex with men, and transgender persons. Initially, the epidemic spread mainly via the sharing of injecting equipment but Malaysia is currently experiencing an increasing trend of new infections transmitted sexually. At the beginning of the epidemic, up to 70-80% of all cases of HIV reported to the Ministry of Health (MOH) were documented among PWID. However, this started to decline considerably since 2004 to 21.5% in 2013. In 2013, 3,393 HIV cases or an average of nine cases per day were reported, though this has levelled off since the peak of the epidemic in 2002 (when it was double the number at 6,978).

The shifting proportion of reported modes of transmission is mostly attributed to two factors: (i) the increase of sexually-transmitted HIV among other key populations at higher risk of HIV and

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<sup>2</sup> Global AIDS Response Progress Report 2014, Ministry of Health, Malaysia

(ii) the implementation of harm reduction programmes: Needle and Syringe Exchange Programme (NSEP) and Methadone Maintenance Therapy (MMT). Nonetheless, while trends in HIV acquisition appear to be shifting, HIV remains prevalent among PWID. Reported cases of HIV tend to be predominantly male (78.5%), young (34.3% aged 13-29 years), heterosexual, and of Malay ethnicity (over 50%). By the end of 2013, Malaysia was reported to have 85,332 people living with HIV. The country has also observed a significant changing trend in HIV infections by sex. Infection rates have shifted with an increase in infection among females. The proportion of female/male cases have increased from 1:99 in 1990 to 1:4 in 2013. In 2013, among males, 21.5% acquired HIV infection via injecting drug use and 73.6% through sexual modes. Most HIV infections among females (51.4%) occurred through heterosexual transmission.

HIV transmission through injection drug use is best prevented by providing a comprehensive package of services to PWIDs and their partners. Malaysia has been committed to reducing harm among PWID with the introduction of the Needle and Syringe Exchange Programme in 2005, and the implementation of Opiate Substitution Therapy (OST), including the Methadone Maintenance Therapy. MMT has also been expanded to 18 prisons in 2013 (from one prison in 2008) and about 137,935 PWIDs (or 81.1%) have been beneficiaries of this programme in the prison.

By the end of 2013, 728 NSEP and 811 OST sites reached a total of 72,686 PWID in government health facilities, NGO sites, private health facilities, National Anti-Drug Agency (NADA) service outlets, and in some prisons. Activities of NSEPs include exchanging used needles for sterile ones, safe disposal of used injecting equipment, reaching out and educating people who use drugs about HIV/AIDS issues, providing referrals to rehabilitation, health and welfare agencies, encouraging safer sex through education and distribution of condoms, and liaising with local agencies such as the police and the NADA.



## 5.0 Methodology

### 5.1 Study design

This study in Malaysia is part of a larger study which tries to measure the effect of the interventions on the behaviour of People Who Inject Drugs (PWID). The bigger evaluation study was designed as a quasi-experimental study utilising cross sectional surveys before and after the intervention had been implemented without comparison sites.

**Face-to-face interviews** to examine knowledge, attitudes and behaviour of PWIDs in relation to HIV/AIDS, their well-being and quality of life, satisfaction with HIV prevention services offered, and their relations with police and community were conducted using a structured questionnaire. The **structured close-ended questionnaire**, used in the initial baseline survey, was also used in this end-of-project evaluation study with some minor amendments. The English questionnaire used for the project in various countries was translated into Bahasa Malaysia, or the Malay language, which is the national language and the primary language for the majority of the clients. The ease of understanding the translated version was tested and amended to ensure the correct data was sought. See Appendix 1A and 1B for the questionnaires in English and Malay.

In addition to the face-to-face interviews, site observation and qualitative interviews with outreach workers at each site was also carried out to obtain additional relevant information to the study.

### 5.2 Sampling strategy

The key variable of interest for calculating the sample size was the standard UNGASS outcome indicator: **“Percentage of injecting drug users reporting the use of sterile injecting equipment the last time they injected”**. This was selected as a key primary indicator of choice for both standardisation and the fact that the indicator has been used widely for measuring country progress on service delivery and reaching most at risk populations-UNGASS.

Eight centres are participating in the CAHR project in Malaysia. A total sample of 280 existing PWIDs from four given geographical locations was selected in accordance with the determined sampling methodology. Proportionate stratified sampling was used to determine the sample size

for each centre. The list of active clients from each centre was obtained to select the sampling units through random sampling with replacement.

***Simple random sampling with replacement.*** Random sampling ensures that ALL existing clients in a recruitment site have equal chances of selection. The process of selection is by random number generation<sup>3</sup> of a pre-prepared sampling frame that lists all the existing clients. Sampling was conducted with replacement—that is, if a selected potential respondent was not available to or declined to participate in the study, the next person on the list was recruited. This process continued until the target sample size was reached in each centre.

The sampling procedure was as follows:

1. The sampling frame with a list of ALL existing active clients in the recruitment site was prepared.
2. Each existing client on the list had a unique number provided by the centre – 1, 2, 3... n, where n is the total number of clients.
3. A random number generator was run to identify the clients on the list to prospectively recruit to the sample.
4. A list of all prospective clients to be recruited on the sampling frame was compiled and given to the selected centres. The total number of prospective clients equalled the target sample size of existing clients for the site.
5. The participating centres were enlisted to assist with providing the venue for the interviews as well as to recruit their outreach workers to approach each identified prospective client on the sampling frame to recruit him/her to the study.
6. Whenever a prospective client was unable to or refused to participate in the study, replacements were made with the next person on the sampling frame.
7. Steps 5 and 6 were repeated until the required sample size was reached.

### **5.3 Sites selection**

For this assessment, 280 respondents from four centres participating in the CAHR project in Malaysia were selected. The four selected centres are located in four different states and include IKHLAS (Kuala Lumpur, Federal Territory), DIC Pahang (Kuantan, Pahang), META (Bahau, Negeri Sembilan), and CAKNA (Hulu Terengganu, Terengganu). The four sites were

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<sup>3</sup> Number generation was performed in SPSS as complete client lists were available for all centres.

selected based on the geographical location, which represent the different characteristics of PWID and various patterns of drug use. Two sites are expansion site with pre-existed needle and syringe programmes and other two sites are new sites initiated by CAHR Project in year 2012.

#### **5.4 Data collection, analysis and quality assurance**

Data was collected through face-to-face interviews, each 30-45 minutes long, using a structured questionnaire. All the interviewers involved in data collection for the end-of-project evaluation were trained by the research coordinator and her assistant (the two primary researchers). Two additional interviewers were recruited and trained in each of the four centres to assist the two primary researchers with the interviews. The primary researchers were involved in the interviews at each of the four centres to ensure consistency. Interviews with 280 clients were conducted in the four selected centres over two months from 16 April to 26 May 2014 (see Appendix 3, Registry). The interviewers were provided with training and also observed during their data collection. In addition, they had easy access to the coordinator for any explanation. Quality checks were maintained during data collection and data entry.

The centre manager and outreach workers provided support at each site for the data collection. A respondent identifier code was given to each participant at the beginning of the interview. This comprised the letters of the respondent's first name, last name, month of birth (two digits) and year of birth (last two digits), gender (1 for male, 2 for female and 3 for transgender). Each participant was remunerated with RM30 (about USD10) as a token of appreciation for their time at the completion of the survey. The surveys were administered at the four participating organization's drop-in-centre office or centre.

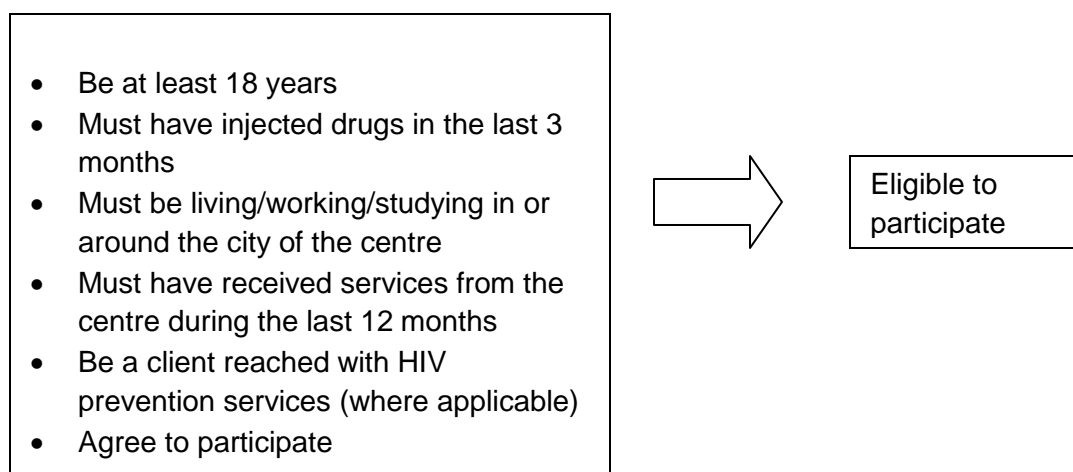
Participants were approached and had the objectives, benefits and risks of the study explained to them. PWID who fulfilled the inclusion criteria were invited to participate. A questionnaire was administered by the trained researchers to examine knowledge, attitudes and behaviour of PWIDs in relation to HIV/AIDS, assess their well-being, quality of life, relationship with police/law, and satisfaction with HIV prevention services that were being offered. The computer software Statistical Package for the Social Sciences (SPSS) version 21 was used for data entry, processing and analysis. Descriptive analysis using frequency and percentage tables provides an overview of the findings.

## 6.0 Results

### 6.1 Sample description

Respondents had to meet specific criteria to participate in the study. They had to be current injecting drug users, be of 18 years old and above, living, studying or working in the selected geographical centres, and received services from that centre, and willingly give consent to participate, as depicted in Figure 1 below.

**Figure 1: Inclusion Criteria**



6.1.1 In total there were 280 respondents with 82 from IKHLAS, 80 from DIC Pahang, 61 from CAKNA and 57 from META as shown in **Table 1**.

**Table 1: Sample Size for each site**

Sites	DIC Pahang (Expansion Site)	CAKNA (New Site)	META (NewSite)	IKHLAS (Expansion Site)	Total	% of sample size	Remarks
Total Client	2000	1532	1444	2070	7046		Based on CAHR M&E plan
Sample size (Existing Client)	80 (28.6%)	61 (21.8%)	57 (20.3%)	82 (29.3%)	280	100%	Site sample size is based on quota for each site

6.1.2 **Table 2** shows the majority of the clients (92%) selected as respondents for this study were existing clients in all four sites. Only about 8% of the respondents were new clients.

**Table 2: Distribution of new and existing clients**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
Existing clients	79	96.3	74	92.5	49	86.0	55	90.2	257	91.8
New clients	3	3.7	6	7.5	8	14.0	6	9.8	23	8.2
<b>Total</b>	<b>82</b>	<b>100</b>	<b>80</b>	<b>100</b>	<b>57</b>	<b>100</b>	<b>61</b>	<b>100</b>	<b>280</b>	<b>100</b>

\*New clients are clients receiving services for less than one year.

6.1.3 Most respondents had also been clients using the services of the centre for more than a year with 45% using the services for one to two years and 46.8% using services for three years or more. In comparison, 2.8% were clients for less than six months while 6.4% had been using the services for between 6-11 months, as shown in **Table 3**.

**Table 3: Length of time clients have been using the services**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
Less than 6 months	0	0.0	3	3.8	2	3.5	0	0.0	5	2.8
6 – 11 months	3	3.7	3	3.8	6	10.5	6	9.8	18	6.4
1 – 2 years	14	17.1	30	38.0	37	64.9	45	73.8	126	45.0
3 or more years	65	79.3	44	55.0	12	21.1	10	16.4	131	46.8
<b>Total</b>	<b>82</b>	<b>100</b>	<b>80</b>	<b>100</b>	<b>57</b>	<b>100</b>	<b>61</b>	<b>100</b>	<b>280</b>	<b>100</b>

## 6.2 Social and demographic characteristics

As shown in Table 4, of the 280 respondents recruited to the study, 92.9% were males, with 6.4% females and 0.7% transgender persons. Upon investigation of the causes for the low number of female clients, according to the centre managers, a number of the males who enrolled as clients sometimes also extended the services received at the centres for their female partners who were PWID. In addition, women were enrolled in separate centres in some of the geographical locations.

Most of the respondents were between the ages of 31 to 40 years (45.7%) or 41 to 50 years (28.9%). This is consistent with data from the National Anti-Drug Information (NADI, 2010) by

the National Anti-Drugs Agency (NADA), which also demonstrated a high representation of drug use among those aged between 30 to 40 years old<sup>4</sup>. They were mostly engaged in occasional odd jobs (67.8%) such as loading/unloading for wholesalers, plantation work, construction work, or as illegal parking attendants, and stall assistants to support their livelihood, and 63.6% supported themselves through occasional earnings and daily wages. The majority of respondents were educated up to lower secondary school level only (41.1%) while an additional 39.6% had a further two years of upper secondary school education. In total, 56% of the respondents did not complete their school education. **Table 4** presents a summary of participants' characteristics and is segregated by recruitment site.

**Table 4: Socio-Demographics of respondents**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
<b>Age Group</b>										
21 – 30 years	10	12.2	15	18.8	8	14.0	5	8.2	38	13.6
31 – 40	29	35.4	38	47.5	25	43.9	36	59.0	128	45.7
41 – 50	28	34.1	19	23.8	18	31.6	16	26.2	81	28.9
51 – 60	14	17.1	8	10.0	6	10.5	4	6.6	32	11.4
Above 60	1	1.2	0	0.0	0	0.0	0	0.0	1	0.4
<b>Gender</b>										
Male	70	85.4	75	93.3	54	94.7	61	100	260	92.9
Female	10	12.2	5	6.3	3	5.3	0	0.0	18	6.4
Transgender	2	2.4	0	0.0	0	0.0	0	0.0	2	0.7
<b>Level of Education</b>										
No education	3	3.7	1	1.3	0	0.0	1	1.6	5	1.8
Primary school education	18	22.0	12	15.0	2	3.5	6	9.8	38	13.6
Lower secondary school education	29	35.4	46	57.5	23	40.4	17	27.9	115	41.1
Upper secondary school education	31	37.8	18	22.5	29	50.9	33	54.1	111	39.6
Incomplete College/University education	0	0.0	2	2.5	0	0.0	4	6.6	6	2.1
Completed College/University education	1	1.2	1	1.3	3	5.3	0	0.0	5	1.8
<b>Occupation</b>										
Permanently employed	20	24.4	17	21.3	11	19.3	13	21.3	61	21.8
Odd jobs	54	65.8	56	70	42	73.7	41	67.2	190	67.8
Unemployed	7	8.5	7	8.8	2	3.5	5	8.2	21	7.5
Disabled/Handicapped	1	1.2	0	0.0	1	1.8	0	0.0	7	2.5
Housewife	0	0.0	0	0.0	1	1.8	0	0.0	1	0.4

<sup>4</sup> Community Action on Harm reduction (CAHR) Baseline Assessment: Malaysia Report, April 2012

<b>How clients support themselves</b>										
Earning a salary	19	23.2	17	21.3	10	17.5	10	16.4	56	20.0
Income from property	0	0.0	0	0.0	0	0.0	1	1.6	1	0.4
Social support from state	3	3.7	7	8.8	6	10.5	7	11.5	23	8.2
Family support	3	3.7	11	13.8	6	10.5	15	24.6	35	12.5
No means to support yourself	6	7.3	7	8.8	0	0.0	1	1.6	14	5.0
Odd-jobs/Occasional earnings	52	63.4	51	63.8	37	64.9	38	62.3	178	63.6

## 6.3 Drug injecting practices

### 6.3.1 Drug injection usage and Risky injecting behaviour

Almost half of the respondents (47.9%) had started injecting drugs early, before they were 20 years old. The majority of respondents injected themselves more than once a day (60.7%) and of these, 65.9% injected at least two to three times a day and a further 29.4% at least four times or more a day. The results were almost similar to those of the previous baseline assessment.

About 42.5% of respondents practiced blood-filling - a practice of drawing blood into the syringe while injecting to ensure that residual drugs left in the syringe during an injection episode is not wasted. However, in the baseline assessment, 89.3% of respondents had practiced blood-filling. About 62% of respondents had previously been injected by someone other than themselves, mainly their friends. Of the last time they injected, almost all participants reported using clean unused needles (93.6%). Most of the participants reported not sharing needles from the time they were involved in the NSEP. The baseline research indicated 94% PWIDs sharing needles, which is more or less the same. However, when respondents were asked whether they had used a clean needle during the past 30 days, in the baseline report only 84% reported using clean needles whereas in the current findings 90.4% used clean needles. (It must be noted that the current sample is larger at 280 than the baseline sample size of 206). Hence, in terms of numbers more are using clean needles now.

However, 10.7% of the respondents reported sharing needles/syringes in the past 30 days. And of the 10.7% who injected with used needles, 57% did so because they ran short of clean needles/syringes and only 30% of them always disinfected the needles before use. In comparison, in the earlier baseline study, 17% respondents shared needles/syringes and 65.7% said they did so because clean needles/syringes were not available.

In addition, about 37% of all the respondents reported sharing equipment like the spoon, cup, cooker and water. Only 45% of them used alcohol swabs always. About 44% of these respondents prepared and injected the drugs in public places, including at the pod where they obtained the drugs, in deserted buildings, in quiet back lanes, and in oil palm estates and the jungle. Also, 70% of the respondents were injected for the first time by friends/sexual partners. **Table 5** below summarizes the drug injecting practices. The baseline report showed 54.4% were injected for the first time by friends/sexual partners.



**Table 5: Drug Usage Characteristics**

	IKHLAS n = 82		DIC n = 80		META n = 57		CAKNA n = 61		TOTAL	
	n	%	n	%	n	%	n	%	n	%
<b>Age client started taking drugs (N=280)</b>										
20 years or less	37	45.1	41	51.3	29	50.9	27	44.3	134	47.9
21 - 30	38	46.3	37	46.3	26	45.6	31	50.8	132	47.1
31 – 40	6	7.3	1	1.3	1	1.8	3	4.9	11	3.9
41 - 50	1	1.2	1	1.3	1	1.8	0	0.0	3	1.1
<b>Injecting practice (last 30 days) (N=280)</b>										
<b>Frequency of drug usage</b>										
Once	0	0.0	1	1.3	4	7.0	0	0.0	5	1.8
2 – 3 times	5	6.1	12	15.0	20	35.1	1	1.6	38	13.6
Once a week	0	0.0	5	6.3	4	7.0	1	1.6	10	3.6
2 – 3 times a week	2	2.4	5	6.3	3	5.3	1	1.6	11	3.9
4 – 6 times a week	0	0.0	7	8.8	6	10.5	4	6.6	17	6.1
Once a day	5	6.1	4	5.0	2	3.5	12	19.7	23	8.2
More than once a day	65	79.3	46	57.5	17	29.8	42	68.9	170	60.7
Have not injected	3	3.7	0	0.0	1	1.8	0	0.0	4	1.4
No answer	2	2.4	0	0.0	0	0.0	0	0.0	2	0.7
<b>Frequency of drug use for clients who inject more than once a day (N=170)</b>										
<i>(Percent based on 170 respondents or 60.7% who inject drugs more than once a day)</i>										
Once a day	2	3.1	1	2.2	1	5.9	4	9.5	8	4.7
2 – 3 times a day	36	55.4	33	71.7	12	70.6	31	73.8	112	65.9
At least 4 times a day	27	41.5	12	26.1	4	23.5	7	16.7	50	29.4
<b>Injecting practices (N=280)</b>										
Practice blood filling	40	48.8	37	46.3	23	40.4	20	32.8	119	42.5
Injected by someone else	61	74.4	40	50.0	38	66.7	35	57.4	174	62.1
Injected with clean needle the last time	74	90.2	75	93.8	54	94.7	59	96.7	262	93.6
Injected with used needle (past 30 days)	19	23.1	6	7.5	1	1.8	4	6.6	30	10.7
<b>Disinfect used needle ( N=30)</b>										
<i>(Percent based on 30 respondents or 10.7% who injected with used needle in the past 30 days)</i>										
Always	2	10.5	2	33.3	1	100	4	100	9	30.0

**Reasons for sharing needle (N=30)***(Percent based on 30 respondents who injected with used needle)*

No clean needle/syringe available	12	63.2	2	33.3	0	0.0	3	75.0	17	56.7
Use needle/syringe from person I trust	3	15.8	4	67.7	0	0.0	1	25.0	8	26.7
Needles/Syringes are expensive	1	5.3	0	0.0	0	0.0	0	0.0	1	3.3
Other	3	15.8	0	0.0	1	100	0	0.0	4	13.3

**Shared injecting equipment (cooker, spoon, cup, cotton, filters, water) (N=280)**

Always	19	23.2	3	3.8	0	0.0	0	0.0	22	7.9
Majority of cases	10	12.2	6	7.5	1	1.8	0	0.0	17	6.1
Half of cases	5	6.1	0	0.0	0	0.0	1	1.6	6	2.1
Sometimes	8	9.8	11	13.8	8	14.0	4	6.6	31	11.1
Rarely	4	4.9	10	12.5	6	10.5	5	8.2	25	8.9
Never	34	41.4	50	62.5	42	73.7	51	83.6	177	63.2
Not applicable	2	2.4	0	0.0	0	0.0	0	0.0	2	0.7

**What injecting equipment is shared (N=101)***\*(All percentages are based on the 101 respondents or 36% who shared injecting equipment)*

Shared spoon/cup/cooker*	38	76.0	28	93.3	16	100	10	16.4	92	91.1
Shared filter*	28	34.1	16	53.3	7	43.8	3	4.9	54	53.5
Shared water*	33	66.0	24	80.0	13	81.3	9	90.0	79	78.2

**Usage of alcohol swabs (N=280)**

Always	36	43.9	31	38.8	36	63.2	24	39.3	127	45.4
Most of the time	6	15.9	13	16.3	1	1.8	11	18.0	31	11.1
Sometimes	25	30.5	29	36.3	10	17.5	22	36.1	86	30.7
Never	15	18.3	7	8.8	10	17.5	4	6.6	36	12.9

**Place where drug was prepared and injected (N=280)**

At home by yourself	39	26.0	34	22.7	41	27.3	36	24.0	150	53.6
At your/your friend's house with other users	25	30.5	15	18.8	20	35.1	35	57.4	95	33.9
In streets/yards/ public places	63	76.8	28	35.0	17	29.8	14	23.0	122	43.6

**How client injected the first time (N=280)**

Injected on his/her own	15	18.3	11	13.8	6	10.5	12	19.7	44	15.7
Injected with help from friend/sexual partner	3	3.7	16	20.0	13	22.8	8	13.1	40	14.3
Friend/sexual partner injected	64	78.0	53	66.2	38	66.7	41	67.2	196	70.0

### 6.3.2 Substances injected/preferred

The respondents injected a variety types of substances, with the most common being heroin among the opiate group (87.9%). In the stimulants group, they took methamphetamines and amphetamines with 19% of respondents saying they took *Pil Kuda* (popular among clients in the east coast of Peninsular Malaysia) and 18.6% reporting they took *syabu* or ice, while 0.7% reported they took Benzodiazepine. Heroin, by far, remains the most common substance injected by participants.

However, morphine (or “*pokteh*” as it is called locally) was also popular among 41% of respondents from CAKNA in Terengganu compared to very small percentages in the other sites. In discussion with the outreach workers in CAKNA, it appears that although morphine is not readily available on the streets in most parts of Malaysia, it is available in the states bordering Thailand, including in the state of Terengganu.

A number of respondents reported that as a result of the CAHR programme in the centres at which they were clients, they had begun substituting injecting heroin with MMT (21.8%). The baseline assessment study did not show any results for MMT but a higher percentage injected heroin at 98.1% compared to the 87.9% in this end of project study.

Please refer to **Table 6** for details.

**Table 6: Substances injected/preferred**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
<b>Opiate</b>										
Heroin	75	91.5	73	91.3	57	100	41	67.2	246	87.9
Methadone	9	11.0	12	15.0	35	61.4	5	8.3	61	21.8
Morphine	3	3.7	2	2.5	3	5.3	25	41.0	33	11.8
Suboxion	1	1.2	0	0.0	1	1.8	0	0.0	2	0.7
<b>Stimulants</b>										
Amphetamine	4	4.9	1	1.3	1	1.8	5	8.2	11	3.9
Methamphetamine	2	2.4	11	13.8	3	5.3	6	9.8	22	7.9
<i>Pil Kuda</i>	0	0.0	23	28.8	2	3.5	29	47.5	54	19.3
<i>Syabu</i>	16	19.5	7	8.8	7	12.3	1	1.6	31	11.1
Ice	8	9.8	8	10.0	4	7.0	1	1.6	21	7.5
Ecstasy	2	2.4	1	1.3	0	0.0	0	0.0	3	1.1
Friage15	1	1.2	0	0.0	0	0.0	0	0.0	1	0.4
Cannabis/ Ganja	2	2.4	0	0.0	2	3.5	0	0.0	4	1.4
<b>Relaxants/sedatives</b>										

Benzodiazepine (Domicum)	0	0.0	3	3.8	0	0.0	0	0.0	3	0.7
<b>Preferred substance</b>										
<b>Opiate</b>										
Heroin	68	82.9	69	86.3	30	52.6	37	60.7	204	72.9
Methadone	4	4.9	6	7.5	24	42.1	3	4.9	37	13.2
Morphine	1	1.2	1	1.3	0	0.0	19	31.1	21	7.5
Suboxion	1	1.2	0	0.0	1	1.8	0	0.0	2	0.7
<b>Stimulants</b>										
Amphetamine	2	2.4	0	0.0	0	0.0	1	1.6	3	1.1
Pil Kuda	0	0.0	2	2.5	0	0.0	1	1.6	3	1.1
Methamphetamine	1	1.2	0	0.0	0	0.0	0	0.0	1	0.4
Syabu	4	4.9	1	1.3	1	1.8	0	0.0	6	2.1
Ice	0	0.0	1	1.3	1	1.8	0	0.0	2	0.7

## 6.4 Police and Law

The majority of respondents (93.9%) had been arrested for drug related crimes such as possessing, buying, and/or selling drugs, and 74.6% of respondents interviewed had been detained in drug detention centres. Respondents who had been held in prisons were also coded as being held in compulsory drug detention centres. Because of the harsh laws regarding drug possession in Malaysia, a number of respondents were held in prisons instead of in compulsory detention centres. In comparison, in the baseline assessment study, 94.2% were arrested and only 54.9% had been in a drug detention centre. There is a possibility that those held in prisons and police lockup other than detention centres were not accounted for in the earlier study as it was not part of the questionnaire. The researchers in the current end of project study thought it was important to include the other modes of compulsory detention in the questioning due to the laws in Malaysia.

However, there were fewer cases of arrests and detention of the respondents in the past one year. In comparison, 45.4% were arrested and 26.1% detained in the past one year. This could perhaps be a result of education and services being provided by the centres. The relationship of respondents with the police and law is tabulated in **Table 7** below.

**Table 7: Police and the law**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
Arrested for drug-related crimes	79	96.3	78	97.5	55	96.5	51	86.6	<b>263</b>	<b>93.9</b>
Arrested for drug-related crimes last year	55	67.1	44	55.0	17	29.8	11	18.0	<b>127</b>	<b>45.4</b>
Kept in compulsory drug detention centres	62	75.6	67	83.8	45	78.9	35	57.4	<b>209</b>	<b>74.6</b>
Kept in compulsory drug detention centres last year	33	40.2	25	31.2	8	14.0	7	11.5	<b>73</b>	<b>26.1</b>

## 6.5 Sexual behaviour

Slightly less than half of the respondents, or 45.7%, had had sexual intercourse in the past 12 months of which 8.2% and 7.1% reported having had sex with casual partners and commercial sex workers, respectively. Of those respondents, only about 4 in 10 participants had used a condom the last time they had sex. The most common reasons provided for not using the condom were that they did not consider it necessary (especially as most of them said they were married with permanent partners), and the second reason for not using the condom was the loss of sensation during intercourse. In the baseline research, many PWIDs (i.e. 139) did not provide answers regarding their sexual habits but of the 97 who had sex the last time, 28 PWIDs or 28.9% admitted to using a condom.

However, the majority of the unmarried respondents reported they did not have sexual intercourse in the last 12 months. This may be because of cultural and religious factors that frown on sex outside of marriage, including harsh punishment for Muslims under the Islamic or *syariah* laws; and the subsequent lack of readiness of the respondents to disclose information regarding their sexual habits. **Table 8** below illustrates the sexual behaviour of the respondents.

**Table 8: Sexual Behaviour**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
<b><i>Had sexual intercourse in the last 12 months</i></b>										
Permanent partner	18	22.0	21	26.2	23	40.4	23	37.7	85	30.4
Casual partner	11	13.4	8	10.0	3	5.3	1	1.6	23	8.2
Commercial partner	11	13.4	5	6.2	4	7.0	0	0.0	20	7.1
<b><i>Used a condom when having sexual intercourse the last time</i></b>										
Permanent partner	2	2.4	7	8.8	7	12.3	10	16.4	26	9.3
Casual partner	5	6.1	4	5.0	2	3.5	1	1.6	12	4.3
Commercial partner	6	7.3	5	6.2	4	7.0	0	0.0	15	5.4
<b><i>Reasons for not using condom</i></b>										
No condom at that moment	4	4.9	6	7.5	2	3.5	2	3.3	14	5.0
Using condom lowers senses	10	12.2	9	11.2	11	19.3	11	18.0	41	14.6
Condoms are expensive	1	1.2	0	0.0	1	1.8	0	0.0	2	0.7
Partner insisted on not using one	1	1.2	4	5.0	4	7.0	5	8.2	14	5.0
Did not consider it necessary	21	25.6	13	16.2	14	24.6	13	21.3	61	21.8
Did not think about it	6	7.3	4	5.0	7	12.3	2	3.3	19	6.8
Was alcohol intoxicated	0	0.0	0	0.0	0	0.0	1	1.6	1	0.4
Was under the influence of drugs	4	4.9	3	3.8	2	3.5	1	1.6	10	3.6

## 6.6 Knowledge about HIV/AIDS and safe injecting

In terms of respondent's knowledge regarding HIV/AIDS and safer injecting practices, 96.8% of respondents were aware that using a shared needle even once could increase the risk of HIV transmission; and 9 out of 10 agreed that HIV infection could be avoided by having sex with only one faithful partner who was not infected. Also, 96.4% were aware that they could avoid HIV-infection by using a condom correctly every time during sexual intercourse. However, about 3.2% of respondents, compared to the baseline study showing 6.8%, remained misinformed that HIV could be transmitted by sharing a toilet, swimming pool, or sauna with an HIV-positive person, and 11% thought that HIV could be transmitted via mosquito bites. **Table 9** illustrates respondents' knowledge about HIV/AIDS and safe injecting by site.

**Table 9: Knowledge about HIV/AIDS and safe injecting**

	Yes		N = 280 No		Don't know	
	n	%	n	%	n	%
I can avoid HIV-infection having sex only with one faithful partner who is not infected.	256	91.4	22	7.9	2	0.7
I can avoid HIV-infection using a condom correctly every time during sexual intercourse	270	96.4	8	2.9	2	0.7
A person looking healthy can be HIV-positive.	271	96.8	7	2.5	2	0.7
A mosquito bite can infect one with HIV.	31	11.1	241	86.1	8	2.9
A person can get HIV by drinking from a glass with an HIV-positive person.	21	7.5	253	90.3	6	2.1
A person can get HIV by sharing a toilet, swimming pool, or sauna with an HIV-positive person.	9	3.2	269	96.1	2	0.7
Using a shared needle even once can increase the risk of HIV transmission	271	96.8	6	2.1	3	1.1
Not using another person's injecting equipment reduces the risk of HIV	269	96.1	7	2.5	4	1.4
If someone is suffering overdose they should be put in a tub of cold water	103	36.8	91	32.5	86	30.7
A person's lips turn blue when suffering from overdose	228	81.4	23	8.2	29	10.4
HIV-infection can be transmitted from an HIV-positive mother to her child during pregnancy.	254	90.7	21	7.5	5	1.8
HIV-infection can be transmitted from an HIV-positive mother to her child during delivery.	196	70.0	60	21.4	24	8.6
HIV-infection can be transmitted from an HIV-positive mother to her child during breast-feeding.	173	61.8	81	28.9	26	9.3

## 6.7 HIV testing

More than 9 in 10 respondents (or 95.4%) reported having undergone a HIV test; and about two in 10 disclosed their status as being HIV positive. (The baseline study shows 189 (91.7%) respondents had undergone HIV testing and 41 of them disclosed their status as being HIV positive.) A higher prevalence was recorded at the IKHLAS (36%) and CAKNA (23%) centres. About 34.4% of those with HIV reported they were not registered with ART because they did not need the treatment yet. The hospitals were not starting them on ART treatment as their CD4 had not reached the count of 350 yet, which was the accepted requirement for treatment in the country. **Table 10** below provides a summary of HIV testing.

**Table 10: HIV testing and results**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	N	%
Undergone HIV test	78	95.1	79	98.8	54	94.7	56	91.8	267	95.4
HIV positive status <i>(Percent based on 267 respondents who underwent HIV test)</i>	28	35.9	12	15.2	8	14.8	13	23.2	61	22.8
Registered with ART <i>(Percent based on 61 respondents with HIV positive status)</i>	4	14.3	5	41.7	6	75.0	8	61.5	23	37.7
<b>Reasons for not registering with ART (N=61)</b>										
<i>(Percent based on 61 respondents with HIV positive status)</i>										
Do not need it yet	12	42.9	5	41.7	2	25.0	2	15.4	21	34.4
Do not have access	0	0.0	2	1.7	0	0.0	0	0.0	2	3.3
Not able to cover costs	2	7.1	0	0.0	0	0.0	1	7.7	3	4.9
Other reasons (fear)	10	35.7	0	0.0	0	0.0	2	15.4	12	19.8

## 6.8 Access to services, and services needed by PWID

The main services received by participants in the study from participating centres in the CAHR programme were needle and syringe exchange (98.2%), as well as access to alcohol swabs (97.5%), injecting water (73.9%), cookers/spoons (77.9%), and cotton balls (77.9%), which were related to the programme.

In addition, other popular services accessed included: HIV testing and counselling (68.2%); information and education on risk reduction practices for safer injecting (88.6%) and safe sex (83.6%); shelter, shower, food, and/or other services (50.7%); and basic health services (58.6%).

However, in contrast between services received and those needed, respondents highlighted their need for the means to strengthen their economic status (92.1%); family support (82.5%); access to legal service (75%); overdose prevention and management care (87.1%); access to prevention, diagnosis and treatment of TB (86.1%) and STI (68.9%); and prevention, diagnosis and vaccination of viral hepatitis (91.1%); access to ART (52.1%); and access to opiate substitution treatment (73.6%). Only 25% had accessed STI prevention and treatment services. None of the respondents had heard about Naloxone but when they were informed that it was a



treatment for drug overdose, almost half of them indicated they would like to have that available to them.

In comparison to the earlier baseline assessment study, there was an increase in the percentage of respondents who reported they accessed the services as well as thought there was a need for all the services in this study.

In addition, only the 18 female respondents in this study were asked about the access to PMTCT and other female related health requirements. All the respondents reported a greater need for all of these services and less than half had accessed any of the services.

The comparison of results for services accessed in the centres and the services deemed to be needed by clients are presented in **Table 11**.

**Table 11: Services accessed compared to Services needed**

		N = 280			
		Services Accessed		Services Needed	
		n	%	n	%
1.	Needles and syringes	275	98.2	272	97.1
2.	Alcohol swabs	273	97.5	269	96.1
3.	Injecting water	207	73.9	258	92.1
4.	Cookers/spoons	218	77.9	228	81.4
5.	Cotton balls	271	96.8	267	95.4
6.	Access / adherence to opiate substitution treatment	108	38.6	206	73.6
7.	Access / adherence to other drug dependence treatment	74	26.4	199	71.1
8.	HIV testing and counselling	191	68.2	258	92.1
9.	Access / adherence to antiretroviral therapy	51	18.2	146	52.1
10.	Access to prevention and treatment of sexually transmitted infections	70	25.0	193	68.9
11.	Condoms	139	49.6	185	66.1
12.	Lubricants	70	25.0	131	46.8
13.	Targeted information, education and communication about safer injecting	248	88.6	265	94.6
14.	Targeted information, education and communication about safe sex	234	83.6	248	88.6
15.	Access to diagnosis, treatment and vaccination of viral hepatitis	123	43.9	255	91.1
16.	Access to prevention, diagnosis and treatment of TB	129	46.1	241	86.1
17.	Shelter, shower, food, other services that satisfy basic needs	142	50.7	224	80.0
18.	Basic health services (including vein care)	164	58.6	248	88.6
19.	Overdose prevention and management education	136	48.6	244	87.1
20.	Naloxone	0	0.0	133	47.5
26.	Home based care and support for HIV positive drug users	90	32.1	167	59.6
27.	Family support (for you and your relatives)	77	27.5	231	82.5
28.	Access to justice/legal services	27	9.6	210	75.0
29.	Economic strengthening activities	58	20.7	258	92.1
<b>*For items 21 to 25, percentages are based on the 18 females who participated in the study.(N=18)</b>					
21.	PMTCT	5	27.7	9	50.0
22.	Family planning	8	44.4	14	77.8
23.	Access to safer abortion	3	16.7	13	72.2
24.	Maternal health services	5	27.8	15	83.3
25.	Other SRH services	5	27.8	13	72.2

## 6.9 Key factors important to service delivery

Respondents agreed to all the key factors important to service delivery as listed in **Table 12**. Additional factors, including more efforts to change the public's negative view about people who use drugs who were attempting to rehabilitate, more job opportunities and an increase in awareness programmes, were also suggested.

**Table 12: Key factors important to service delivery**

No.		N = 280			
		Yes		No	
		n	%	n	%
1.	Accessibility – close to my home, and open when I need it	279	99.6	1	0.4
2.	Staff friendliness	280	100	0	0.0
3.	Staff professionalism	278	99.3	2	0.7
4.	Range / menu of services being provided	268	95.7	12	4.3
5.	Confidentiality – information about my drug use and HIV status will be anonymous and won't be given to Government authorities	275	98.2	5	1.8
6.	Cost of services / services being free	280	100	0	0.0
7.	Availability of peer support	274	97.9	6	2.1
8.	Other important factors:				
	• Need a bigger space				
	• Need van to transport clients to centre/hospital				
	• Public view must be changed				
	• Need job opportunities				
	• Have longer opening hours				
	• Need more awareness programmes				
	• Provide more food and drinks				
	• Insurance plan for personal/accident				

### 6.10 Knowledge associated with risks of drug injection and use

Generally, the majority of the respondents were aware of the factors associated with the use of clean needles and syringes and risks associated with dangerous practices as reported in **Table 13**.

**Table 13: Did staff give information about the risks associated with the following:**

No.		IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
		n	%	n	%	n	%	n	%	n	%
1.	Buying liquid drug in a syringe prefilled by someone else	52	63.4	62	77.5	46	80.7	31	50.8	191	68.2
2.	Drawing drug by several people from common syringe/container	65	79.3	66	82.5	54	94.7	42	68.9	227	81.1
3.	Taking the usual dose after long abstinence	61	74.4	70	87.5	51	89.5	45	73.8	226	80.7
4.	Buying drug from new supplier without trusted reference	49	59.8	59	73.8	46	80.7	31	50.8	185	66.1
5.	Sharing container with water for preparing drug/rinsing syringes	62	75.6	68	85.0	51	89.5	51	83.6	232	82.9
6.	Mixing substances	59	72.0	66	82.5	51	89.5	44	72.1	220	78.6

### 6.11 Well-being and quality of life

More than half of the participants (51.4%) reported that their basic needs such as food, shelter, and clothing were currently fully met, while 53.6% said they felt safe and secure constantly. The percentages from the baseline survey were 52.9% and 47.1% respectively. However, there was more insecurity among the clients of IKHLAS in urban Kuala Lumpur than the other more semi-urban sites. Cost of living in Kuala Lumpur is more expensive than in the other geographical locations, which may be a contributing factor to this feeling.

The majority of respondents (both males and females) reported that health services were fully accessible to them (62.1% compared to 85% in the baseline study), while only 22.2% of females reported sexual and reproductive health services were fully accessible to them. In addition, 55% of the respondents suffered from some anxiety and depression, and 52.9% said they experienced some level of stigmatization (as opposed to 3.4% and 7.8% respectively in the baseline study). Also, six out of ten reported that they had experienced some negative attitude or action by police and law enforcement officers (versus 7.8% in the baseline study). In addition,

about half of them (50.3%) were not happy with their economic well-being. As pointed out earlier in the report, the majority of the respondents only had occasional or odd jobs that paid daily wages. Nevertheless, more than half of them reported they had some family and community support. **Table 14** provides detailed results for the four centres.

A few respondents also made additional comments on their well-being. They said that the Centre was too far from home, they would appreciate income-generating programmes and financial assistance for small businesses, financial support for surgery, shelter in the centres until the client got employment, a specific programme explaining about methadone, a sharing session with rehabilitated peers, professional counselling services, and in the Terengganu centre specifically, additional visits by outreach workers to the locations of the clients to provide them with additional syringes.

**Table 14: Well- being and quality of life**

	IKHLAS N = 82		DIC N = 80		META N = 57		CAKNA N = 61		TOTAL N = 280	
	n	%	n	%	n	%	n	%	n	%
<b>Are your basic needs fully met?</b>										
They are currently fully met	19	23.2	46	57.5	39	68.4	40	65.6	144	51.4
They are somewhat met	29	35.4	33	41.3	13	22.8	12	19.7	87	31.1
They are not met	34	41.5	1	1.3	5	8.8	9	14.8	49	17.5
<b>Do you feel safe and secure?</b>										
Constantly feel safe and secure	24	29.3	41	51.2	47	82.5	38	62.3	150	53.6
Somewhat safe and secure	24	29.3	31	38.8	10	17.5	15	24.6	80	28.6
Feel vulnerable	33	40.2	8	10.0	0	0.0	8	13.1	49	17.1
No answer	1	1.2	0	0.0	0	0.0	0	0.0	1	0.4
<b>Do you feel pain/discomfort?</b>										
No pain/discomfort	25	30.5	40	50.0	39	68.4	41	67.2	145	51.8
Moderate pain/discomfort	40	48.8	35	43.8	18	31.6	18	29.5	111	39.6
Extreme pain/discomfort	17	20.7	5	6.3	0	0.0	1	1.6	23	8.2
No answer	0	0.0	0	0.0	0	0.0	1	1.6	1	0.4
<b>Do you feel anxiety/depression?</b>										
Not anxious or depressed	20	24.4	31	38.8	38	66.7	37	60.7	126	45.0
Moderately anxious or depressed	41	50.0	44	55.0	19	33.3	22	36.1	126	45.0
Extremely anxious or depressed	21	25.6	5	6.3	0	0.0	2	3.3	28	10.0
<b>Do you feel you are being stigmatised?</b>										
Don't feel stigmatised	26	31.7	33	41.2	39	68.4	34	55.7	132	47.1
Some degree of stigmatisation	35	42.7	38	47.5	17	29.8	22	36.1	112	40.0

Highly stigmatised	21	25.6	9	11.3	1	1.8	5	8.2	<b>36</b>	<b>12.9</b>
<b>How accessible are health services to you?</b>										
Health services fully accessible	26	31.7	60	75.0	38	66.7	50	82.5	<b>174</b>	<b>62.1</b>
They are somewhat accessible	45	54.9	17	21.3	16	28.1	7	11.5	<b>85</b>	<b>30.4</b>
They are accessible but there is negative attitude by health care providers	7	8.5	1	1.3	3	5.3	2	3.3	<b>13</b>	<b>4.6</b>
They are not accessible	4	4.9	2	2.5	0	0.0	2	3.3	<b>8</b>	<b>2.9</b>
<b>How accessible are sexual and reproductive health services? (18 Females only)</b>										
(% based on number of females at each centre)										
They are fully accessible	2	20.0	1	20.0	1	33.3	0	0.0	<b>4</b>	<b>22.2</b>
They are somewhat accessible	3	30.0	2	40.0	1	33.3	0	0.0	<b>6</b>	<b>33.3</b>
They are not accessible	0	0.0	2	40.0	0	0.0	0	0.0	<b>2</b>	<b>11.1</b>
No answer	5	50.0	0	0.0	1	33.3	0	0.0	<b>6</b>	<b>33.3</b>
<b>How satisfied are you with your economic well-being?</b>										
Fully satisfied with economic well-being	8	9.8	17	21.2	6	10.5	9	14.8	<b>40</b>	<b>14.3</b>
Satisfied	12	14.6	19	23.8	18	31.6	9	14.8	<b>58</b>	<b>20.7</b>
Somewhat satisfied	12	14.6	9	11.3	10	17.5	10	16.4	<b>41</b>	<b>14.6</b>
Not satisfied	33	40.2	30	37.5	21	36.8	25	41.0	<b>109</b>	<b>38.9</b>
Strongly dissatisfied	17	20.7	5	6.3	2	3.5	8	13.1	<b>32</b>	<b>11.4</b>
<b>Do you experience negative attitudes/actions by police/law enforcement officers?</b>										
Do not experience negative attitudes	19	23.2	37	46.2	31	54.4	35	57.4	<b>122</b>	<b>43.6</b>
Experience some negative attitudes	31	37.8	32	40.0	17	29.8	23	37.7	<b>103</b>	<b>36.8</b>
Experience extreme negative attitudes	31	37.8	11	13.8	9	15.8	3	4.9	<b>54</b>	<b>19.3</b>
No answer	1	1.2	0	0.0	0	0.0	0	0.0	<b>1</b>	<b>0.4</b>
<b>Do you feel you are supported by your community?</b>										
High level of support	9	11.0	30	37.5	22	38.6	17	27.9	<b>78</b>	<b>27.9</b>
Some support	51	62.2	38	47.5	25	43.9	26	42.6	<b>140</b>	<b>50.0</b>
No support at all	22	26.8	12	15.0	10	17.5	18	29.5	<b>62</b>	<b>22.1</b>
<b>Do you feel your family supports you?</b>										
My family supports me	26	31.7	37	46.2	41	71.9	44	72.1	<b>148</b>	<b>52.9</b>
My family partially supports me	21	25.6	21	26.3	10	17.5	10	16.4	<b>62</b>	<b>22.1</b>
My family does not support me	11	13.4	4	5.0	4	7.0	6	9.8	<b>25</b>	<b>8.9</b>
My family does not want any relations with me	23	28.0	17	21.3	2	3.5	1	1.6	<b>43</b>	<b>15.4</b>
No answer	1	1.2	1	1.3	0	0.0	0	0.0	<b>2</b>	<b>0.7</b>

In comparison to the earlier baseline assessment, there was not much difference in the basic needs being fully met, but the percentage of responses for a number of the other variables differed as indicated above.

#### **6.12 Additional observations based on visits to centres and in-depth interviews with PWIDs**

In the course of conducting the interviews and in addition to the responses sought in the research questionnaire, a number of clients also gave additional information, which seemed relevant to support the findings. In addition, further information regarding issues raised by the PWIDs was provided by the staff at the centres visited after probing by the researchers. Thus, a number of recommendations were proposed based on the additional information as well.

For example, it was observed that onsite testing on TB for PWID is a best practice observed in the CAKNA Terengganu site, and this could also be adopted by relevant agencies in all sites.

Reports showed that only 237 of 27,803 CAHR clients have been tested for Hepatitis C. Currently, according to centre staff there is a quota for Hepatitis C treatment in government hospitals due to high costs. Thus, there needs to be a scaling up of the testing and treatment of Hepatitis C, and this be made available to all PWIDs.

It was found that clients resorted to home remedies to treat STI, often due to ignorance. It is thus recommended that STI testing be routinely done in conjunction with HIV testing for PWIDs in all sites. There also needs to be an increase in awareness and education programmes on the early testing of STI as well as the importance for proper medical treatment.

It was also found that a number of PWID who were on MMT continued to mix and use other drugs because they found the treatment dosage inadequate; or they did not have the means to make daily trips to the medical centres for the treatment. Currently, the minimum MMT start-up dosage is 5 to 10 mg. Also, a split dose could be provided (for example, the client takes 50mg a day, but by the end of the day he might have withdrawal symptoms again. As such, the dose could be split to 25mg in the morning and 25 mg in the evening as take home dosage.)

Also, in some hospitals treatment with a lower starting dosage is begun immediately on the client while waiting for the liver test results; while in other medical centres the clients have to wait for their liver test results (which can take up to two months) before they are started on MMT. Because of the long wait, in a number of cases the clients lose motivation and do not follow up on the results and thus forgo starting on MMT.

Of the total 27,803 IDU clients of the CAHR project, only 803 are on MMT. Currently basic information is provided to PWIDs on methadone in the centres. However, during the interviews a number of PWIDs requested for more information and education on MMT and its benefits. Thus, there is a need for more education on Methadone Maintenance Therapy (MMT).

## **7.0 Limitations**

It was a challenge to get the selected sampling units to come to the data collection centre for the interview. However, this was overcome by enlisting the assistance of the participating centres. Outreach workers from the respective centres assisted in contacting the selected respondents, or their replacements, a few days before the scheduled day of interview. They also provided transport and helped to fetch the respondents from their homes or place of work for the interviews in some cases. The centres were given a small token for their assistance in arranging these interviews.

A second challenge was to ensure diversity in the sample. Most of the sample comprised Malay males at about nine out of ten respondents. Very few women and transgender individuals were part of the sample because the centres had hardly any of them registered as clients of the CAHR project. In addition, there were very few Indians or Chinese clients of the centres. Thus, the centres tried to get these groups as replacements wherever they could. It is important to have diversity among staff, as then it would be easier for the different ethnic and gender groups to enlist members for the centres from among the different groups.

## **8.0 Discussion and Conclusions**

The CAHR programme is seen to have made an impact on the injecting behaviour of the clients. The majority of the clients interviewed reported that since this CAHR programme was introduced they had stopped sharing needles and syringes since they could now get them free from the centres. In addition, a number of respondents reported that as a result of the



programmes by the centres at which they were clients, they had begun substituting injecting heroin with MMT (22.8%), especially in the META centre in Bahau, Negeri Sembilan.

The Centres also appeared to be making efforts to enhance the economic well-being of the clients registered with them, especially in DIC Kuantan and CAKNA in Terengganu, where the centres had set up small businesses, including car wash places in Kuantan; and in Terengganu, where the homeless and unemployed clients were encouraged to farm on reserved farming plots managed by the Centre outreach workers, to grow vegetables for sale to the public.

Similar to findings in the 2012 baseline study, and other studies of PWIDs in Malaysia, the majority of respondents were males aged between 31 to 40 years who had received some secondary education and mostly earned daily wages through occasional employment. The majority of the PWID respondents preferred to inject heroin, while methadone, *pil kuda* and *syabu* were also reported to be popular. Almost all of the respondents reported using a clean needle for their last injection. A significant proportion of those interviewed consisted of older injectors and a large majority had been arrested for drug related offences and/or been incarcerated in a drug rehabilitation centre.

As also indicated in the 2012 study and similar to findings in the IBBS 2009 study, sex with sex workers is not uncommon but the rate of condom use with both permanent and casual sexual partners was low. Self-reported HIV prevalence is high at 22.8%, and using condoms would be an important mechanism for the bridging of the HIV transmission from their sexual partners and into the general community. Thus, while the study showed respondents had basic HIV knowledge, not using condoms for protection and still sharing needles and other drug preparation paraphernalia indicates a gap between awareness and practice. As also indicated in the 2012 baseline assessment, in terms of service needs, a significant number of clients continue to request for psycho-social support beyond the provision of clean needles and syringes to include opportunities for economic generation activities.

In a follow up to the baseline assessment of 2012, there is a continued need for a comprehensive HIV prevention strategy for PWID, including the following common elements that are proven to be effective: easy access to clean needles and syringes in sufficient quantities, decriminalization of drug use and drug possession, provision of services that would

improve the living conditions of PWID, and better integration of HIV prevention and treatment services for PWID.

Centres and related agencies need to put into place structures that will ensure all PWID receive adequate care to ensure harm reduction efforts reach to all who are vulnerable in the community, irrespective of gender and ethnicity.

## **9.0 Recommendations**

A number of recommendations based on the findings of the end-of-project study are proposed for consideration by relevant national and international agencies as well as NGOs.

9.1 Onsite testing on TB for PWID is a best practice observed in the CAKNA Terengganu site and needs to be adopted by relevant agencies in all sites. HIV-TB related deaths are on the increase in Malaysia. The World Health Organization estimates that the risk of developing TB is 12 to 20 times greater among people living with HIV than among those without HIV infection. According to the Global AIDS Response Progress Report 2014 by the Malaysian Ministry of Health, 16,000 to 20,000 new cases of TB are reported annually in Malaysia. Presently, the government conducts routine TB-HIV screening for all new inmates in prisons and drug rehabilitation centres. TB testing needs to be extended to all sites for early treatment and containment.

9.2 There needs to be a scaling up of the testing and treatment of Hepatitis C, and its availability be made to all PWIDs.

9.3 Community Based Testing for HIV needs to be expanded to all sites. Although the Ministry of Health, Malaysia has stated that HIV testing can only be conducted by certified healthcare providers, recommendations based on World Health Organization guidelines suggest that recognised NGO officials can also be trained to do so in their communities. This will ensure PWIDs who live and/or work a distance from the hospital, and where relevant their families as well, will get the required testing done early.

9.4 There needs to be an increase in awareness and education programmes on the early testing of STI as well as the importance for proper medical treatment. It was found that clients

resorted to home remedies to treat STI, often due to ignorance. It is thus recommended that STI testing is done as a routine in conjunction with HIV testing for PWIDs in all sites.

9.6 A number of clients reported that while they had been tested as HIV positive, ART treatment was only begun at a late stage. Anti- retroviral treatment or ART is currently only provided to clients who have a minimal CD4 count of 350. However, guidelines provided by WHO recommend that ART be initiated for clients earlier at a minimal CD4 count of 500. It is recommended that the guidelines by WHO be applied for HIV cases in Malaysia at an earlier stage as well.

9.7 There is a need for more education on Methadone Maintenance Therapy (MMT); as well as a need to review and revise guidelines for MMT, including methadone dosage to standardize the procedure of starting PWIDs on MMT. It is recommended the start-up dosage be increased, and the required frequency of visits to the medical centres be reduced with an increase in number of dosages provided per visit.

9.8 Naloxone is currently available only in the emergency response room. It is recommended that Naloxone be more widely introduced as a treatment for drug overdose. Clients resorted to home remedies for drug overdose, which could prove to be dangerous for them. In addition, clients need to be educated on the conditions of drug overdose so that they can seek correct and speedy treatment from medical centres. Peer education on overdose prevention and management could also be introduced by the centres.

9.9 It is also recommended that professional support for client's mental health be provided in future harm reduction programmes. A comparison with the baseline study shows that there is an increase in the percentage of clients who said they faced anxiety and depression. During the interviews in the end-of-project study, a number of clients also requested for professional counselling. Professional counselling would assist in alleviating depression and anxiety commonly faced by PWIDs.

9.10 This year the *Low Death Space Syringe* has been introduced. It is recommended that this be made available in all the programmes because of its increased safety features and the reduction on reuse of syringes.

9.11 It is important to recognize the importance of providing sterile water for safer drug injection. Provision of sterile water was introduced by the CAHR project, and it would be worthwhile to include providing sterile water in other harm reduction programmes as well in Malaysia. Most PWIDs interviewed in this study appreciated the recent provision of sterile water since the CAHR project was initiated in the centres. They reported feeling more secure with its use in their drug injection practices.

9.12 It is recommended that the number of off-site visits be increased, especially in the more rural areas. Because of the mobility of PWIDs, due to their casual employment and the distance of workplace and homes from the centre, additional off-site visits by the outreach workers would ensure PWIDs received their timely quota of needles and syringes.

9.13 In addition to the registered clients, the four centres examined also referred beneficiaries or family members of clients to healthcare centres for testing and treatment, with a total of 130,218 benefitting from this service under the CAHR project. This service, started by the CAHR project, is very much appreciated by the clients, and therefore needs to be adopted by other harm reduction programs such as those funded by the Ministry of Health and Global Fund for AIDS, Tuberculosis and Malaria in Malaysia.

9.14 Finally, in the course of conducting this study, it was observed there were very few female and transgender clients in the centres as well as few clients from ethnic groups other than the Malays (such as Indians and Chinese). Perhaps, one way of making it more comfortable for all who are in need of these services to be able to participate more fully in the available programmes in the centres would be to ensure increased diversity (representation of the various minority groups) in the recruitment of outreach workers and staff of the centres.