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# An Exploratory Qualitative Assessment of Self-Reported Treatment Outcomes and Satisfaction Among Patients Accessing an Innovative Voluntary Drug Treatment Centre in Malaysia

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## Abstract

**Background—**In Malaysia, compulsory drug detention centres (CDDCs) hold suspected drug users for two years without adjudication. Acute detoxification without healthcare access has been documented. CDDCs are criticized globally due to ineffectiveness in treating addiction and human rights violations. In response, the Malaysian government began transitioning these facilities into voluntary drug treatment centres known as “Cure and Care” (C&C) centres that embrace a holistic treatment-based approach to drug addiction rehabilitation.

**Methods—**An explorative qualitative study was undertaken to explore patient perspectives and satisfaction regarding treatment and services at the new Cure and Care centre in Kota Bharu, Malaysia. A convenience sample of 20 patients was recruited to participate in semi-structured in-depth interviews. Content analysis approach was used to identify the salient themes.

**Results—**Patients identified methadone treatment, psychosocial programs, religious instruction, and recreational activities as important factors contributing to treatment success for addressing both health and addiction needs. Though many had previously been in a CDDC, adherence to treatment in the C&C centre was perceived to be facilitated by the degree of social support, the voluntary nature and the array of new programs available for selection.



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**Conclusion—**C&Cs represents a dramatic shift in the Malaysian government's approach to drug addiction. Our findings demonstrate positive patient experiences associated with the holistic treatment-based approach of these centres. This exploratory study provides additional evidence to document this ongoing policy transition and may guide continued expansion of new holistic drug treatment programs across the country.

**Keywords**

Malaysia; qualitative research; voluntary addiction treatment; compulsory drug detention centres; patient satisfaction

## 1. INTRODUCTION

Compulsory drug detention centres (CDDCs) that detain suspected drug users without due process are common throughout Asia, though recent evidence has suggested a political shift away from them (Amon, Pearshouse, Cohen, & Schleifer, 2014) due to international criticism of human rights violations and ineffective treatment programs. In 2012, thirteen United Nations entities issued a joint statement calling for immediate closure and release of detainees in CDDCs (UNODC/ESCAP/UNAIDS, 2012).

Malaysia legislatively mandated CDDCs in 1983, known as Pusat Serenti (PS) in Bahasa Malay, operated by the Ministry of Home Affairs under the National Anti-Drug Agency (AADK) (Tanguay, 2011). The Dangerous Drug Act (1952) and Drug Dependence (Treatment and Rehabilitation) Act (1983) required drug users to undergo a mandatory two-year detention without due process (Kamarulzaman, 2009). In 2010, approximately 6,658 individuals were detained in Malaysia's 28 CDDCs (Fu, Bazazi, Altice, Mohamed, & Kamarulzaman, 2012). At that time, CDDC patients were documented to have profoundly inadequate access to medical care and addiction treatment (Fu et al., 2012), with evidence of excessive corporal punishment (Mohamed, 2012). Moreover, relapse to drug use within one year post-release from CDDCs ranges from 70–90% (WHO, 2009a), attesting to the inadequacy of treatment.

More recently, in recognition of the lack of efficacy, poor access to treatment and care and absence of evidence-based treatments available in Malaysian CDDCs, governmental policy sought to improve access to treatment-based programs and reduce the use of detention and forced rehabilitation ("Good Practices in Asia: Scale-up of Harm Reduction in Malaysia," 2011). In response to not achieving its Millennium Goals to reduce HIV/AIDS, a 2005 National Strategic Plan was created to reduce HIV transmission in Malaysia where HIV was largely fueled by people who inject drugs (PWIDs). The country's first step was to initiate and expand harm reduction programs through the Ministry of Health, including needle and syringe exchange programs (NSEP) and opioid substitution therapy (OST) ("Malaysia 2012 Global AIDS Response Country Progress Report," 2012; Reid, Kamarulzaman, & Sran, 2007). After initial recognition that harm reduction programs worked, other governmental sectors began to attempt HIV transmission reduction, by introducing OST into prisons (Ghani et al., 2014; Wickersham, Marcus, Kamarulzaman, Zahari, & Altice, 2013; Wickersham, Zahari, Azar, Kamarulzaman, & Altice, 2013), followed by a 2010 AADK plan to transition some of the CDDCs into voluntary drug rehabilitation programs called

Cure and Care (C&C) clinics. These innovative rehabilitation programs are operated by the same agency that oversees the CDDCs, but represent the first of its kind in the country where the intent is to provide a holistic treatment strategy with free services like tuberculosis screening and OST (which are banned within CDDCs) without any legal repercussions if abstinence from drugs is not achieved (Al-Darraji et al., 2013; Tanguay, 2011).

While globally the transition from CDDCs to voluntary C&C centres has been heralded as a positive change in Malaysian policy by the international community (Amon et al., 2014), no assessment of what these services provide nor how patients react to them has yet been conducted. In addition, while the effectiveness of OST has been validated in many studies (Amato et al., 2005; Mattick, Breen, Kimber, & Davoli, 2009), the supplemental value of religious programs, counseling, and vocational training combined with drug addiction treatment in Southeast Asia has not been assessed. Though traditional assessments of drug treatment effectiveness have relied on an array of specific substance abuse treatment outcomes (e.g., urine toxicology testing, employment, lack of involvement with the law, social and family integration), qualitative research provides useful context into health services acceptability and can guide health policy with its ability to detail individual perspectives and provide meaningful explanations about treatment (Curry, Nembhard, & Bradley, 2009; Sofaer, 1999). This exploratory study aims to evaluate patient perspectives and satisfaction of the new C&C treatment model in Malaysia and generate insight into the impact of its services on self-reported treatment outcomes.

## 2. Methods

### 2.1 Study Setting

Kelantan, a Northeastern Malaysian state, is one of the most conservative Muslim states in the country with a predominantly ethnically Malay population. Kelantan's C&C in Kota Bharu was a women's CDDC from 2005–2010 until it was transitioned in 2010 into the second C&C clinic in Malaysia. At the time of the study, the centre's inpatient capacity included 50 inpatients plus 684 outpatients using ongoing ambulatory treatment, and had waiting lists for services. Staffing was comprised of drug treatment counselors, spiritual leaders, recreational staff and peer educators, a pharmacist, and a psychologist, but no on-site doctor. Patients were able to visit a doctor and pharmacist at a nearby clinic. Unlike other treatment facilities in Malaysia where opioid dependence is highly prevalent, the majority of patients at this C&C were admitted for treatment of amphetamine-type substances (ATS), also known as 'Pil Kuda' in Malay; no evidence-based medication currently exists for treating ATS addiction (Lee & Rawson, 2008).

Each new C&C patient first undergoes a comprehensive intake by a trained counselor. Based on type and severity of their addiction, and social and legal situation, the patient selects rehabilitative activities that may include OST, psychosocial counseling, and religious instruction provided in group format or in one-on-one sessions. Patients can participate in optional physical activities including group games, hiking trips, artistic activities, musical therapy, and vocational training. Most individuals choose to participate in several activities due to the non-restrictive menu of daily treatment options available.

### 2.2 Data Collection

Recruitment and data collection occurred from June to July 2012. Patients were informed about the study through advertisements posted around the centre and by the C&C staff making phone calls to participants to inform them that the study was available and optional. Current and former patients aged 18 years or older who received treatment from the C&C for a minimum of one month were eligible for inclusion in the study. Overall, a convenience sample of 105 current and former patients participated in a larger concurrent quantitative study, of which 47 were inpatients, 49 were outpatients, and 9 were former patients who had completed the program. From among these, 77 agreed to participate in this qualitative substudy that was intended to include patients with a variety of different substance use disorders (e.g, opioids, ATS) and addiction severity levels – all gleaned from data from the quantitative study. Twenty patients participated in the interview within the time-frame of the study. A trained research assistant independently employed by the community-based syringe exchange program met with each patient in a private setting without the presence of C&C staff and completed informed consent procedures before proceeding with in-depth interviews.

Semi-structured interviews were conducted in Bahasa Malay, using an interview guide consisting of an open-ended set of questions regarding drug use, family, and criminal history, barriers to treatment before coming to the C&C, and satisfaction with C&C services (Table 1). Interviews ranged from 35–58 minutes. All interviewed study participants were paid 30 *ringgit* (~$10 USD) for their time. All interviews were audio-recorded and later transcribed. After transcription, they were translated into English and back-translated into Bahasa Malay to check that transcripts were loyal to the respondents' meanings (Chen & Boore, 2010). This study was approved by the University Malaya Medical Centre Medical Ethics Committee and the Yale University Human Investigation Committee.

### 2.3 Analysis

Interviews were analyzed by content analysis, an inductive qualitative research technique that uses words and phrases to identify salient themes related to the research questions (Pope, Ziebland, & Mays, 2000). Two researchers MG and FK analyzed the transcripts using Atlas.ti 7 software and grouped recurring concepts from the responses into codes that represented the themes relating to their personal drug use, family, and criminal history, treatment experiences before coming to the C&C, and descriptions of their treatment experiences at the C&C. The researchers discussed with each other ambiguous excerpts and came to a consensus about how they should be coded.

## 3. RESULTS

The characteristics of the sample are summarized in Table 2; 8 were inpatients, 11 were outpatients, and 1 was a former C&C patient who now serves as a peer educator. On average, patients had been receiving treatment for 11 months at the time of the interview. Participants were all men between the ages of 18 and 50 years and 14 participants had previously been detained at a Pusat Serenti (PS). The drug of choice was Pil Kuda for 7

participants, and opioids for 11 participants. Five participants reported having HIV and 3 reported having had tuberculosis.

Participants expressed satisfaction with services provided at C&C and with their own progress towards recovery. Treatment outcomes identified as important by the patients included diminished withdrawal symptoms and craving for drugs. Analyses of participant interviews identified four services of the C&C that contributed most to these positive results: methadone treatment, psychiatric counseling, religious instruction, and recreation. The open environment with strong and trusting relationships among peers and staff was attributed to program adherence. Participants felt that their access to healthcare greatly benefited their overall health. Finally, participants were optimistic about the progress they have made, but expressed hesitation and uncertainty about the future.

### 3.1 Medication-assisted Treatment: Opioid Substitution Therapy

Patients with opioid dependence expressed great satisfaction with methadone treatment for combating withdrawal symptoms and desire for drugs. Patients were relieved that they could receive free treatment and that methadone had allowed them to function normally on a daily basis, be productive in their work and improve relationships with their family.

> “I realized that methadone really works and that I’m able to forget about drugs and I don’t get the withdrawals anymore. I can also work without the distraction of drugs.” (#6)

> “I used to always think about drugs, but now since I started taking methadone, I do not feel [the desire for] it. Even if I take [the] drugs, I don’t feel anything” (#1)

> “It’s very effective. I think methadone really helped to get rid of [the] addiction to drugs. I don’t have the withdrawals and I can live like other people without drugs… I can work, I can live with my children at home. Even though I’m short on money, my life is good without drugs.” (#7)

One patient noted logistical difficulties with receiving his methadone dosage, mainly because there was only a restricted 30-minute period when methadone was distributed.

> “It’s easy for me to get treatment here and I’m comfortable here. But once in a while, when my vehicle breaks down, I am forced to use public transport and it is difficult because my methadone treatment here is opened for only half an hour.” (#5)

OST patients also expressed initial hesitation about the evidence-based treatment stemming from traditionally negative perceptions held by them and their families that it is simply substituting one addiction for another instead of treating the underlying causes of addiction. Some initiated methadone without family support and many expressed desire to eventually eliminate their need for methadone and cease medication-assisted therapy permanently.

> “My family doesn’t fully support me to take methadone because the issue is that it’s still a drug. But I take methadone to work. I can think better, I know more about myself. It just helps me make choices because to me the government

> introduced methadone for a reason and I think it's good. I explained that to my family about methadone and they understood me after that." (#10)
>
> "I believe that the treatment here works. But I would like to stop methadone, because I do not want to depend on it. I will slowly stop taking methadone and stop drugs completely." (#1)

### 3.2 Non-medication-assisted Treatment Services

For patients entering C&C seeking treatment for non-opioid drugs such as amphetamines, no medication-assisted treatment has proven to be effective for maintaining abstinence from simulants (Lee & Rawson, 2008). Patients must therefore rely on alternative treatment approaches offered by the centre such as psychiatric counseling, religious instruction, and group exercises and other activities. Despite uncertainty surrounding the effectiveness of these programs in preventing relapse, patients with opioid dependence and non-opioid dependence believe they have benefited from various components of these services.

**3.2.1 Psychosocial Programs—**In addition to the full-time psychologist, there are a number of professional and peer-based counselors who see patients in group and one-on-one sessions, depending on need and availability. Patients responded positively to the counseling they receive, stating that it helps them strengthen their determination to recover from addiction and cope with challenges they expect to encounter outside the C&C. Several patients believe that this is the most effective service offered by the C&C.

> "The best treatment is the psychosocial treatment. Through group discussion we are taught how to get over triggers of drugs, for example avoid keeping lots of money." (#17)
>
> "The psychosocial treatment…is very helpful to me and I can used it while I'm outside [of the C&C]." (#2)

Patients believe that the benefit of the psychosocial programs is not only limited to drug abstinence. Patients also appreciate the positive behavioral outcomes associated with better control of anger and avoidance of illegal actions.

> "I believe in the treatment, especially the psychosocial classes. [It teaches us] how to control emotions from the heart…If we are really determined to change, there's no problem, we can change. I came here with the intention of being better." (#18)
>
> "The psychosocial program gives me plenty of knowledge on recovering because I can now control my feelings when I have problems… A lot has changed. I used to be hot tempered; now I can control my emotions. I used to be quiet, now I'm friendlier. I used to steal, not anymore." (#11)

**3.2.2 Staff and Support—**Patients strongly emphasized that it was helpful to be in such an encouraging and supportive environment surrounded by peers and staff who had a deep understanding of the challenges and difficulties faced by the patients. Participants often referred to other patients and staff members as "siblings" or a "second family" and felt

empowered to have a close relationship with them where thoughts and feelings could be shared and discussed freely.

> "I'm so close to my friends here, we are like siblings. If I have any problems, I share it with them and they share their problems with me too…They always help me out in difficult times." (#3)

> "It can be said that the staff and my friends here are like my second family. They all support me to recover from my addiction. They know the addicts who come to the C&C and they help in any way they can to stop us from using drugs." (#6)

This closeness is evidently promoted by an "us vs. them" phenomenon. Since patients are presented with judgment and discrimination outside the centre, they find comfort in each other's positivity and acceptance.

> "Here we are family. We are always together and united in heart. If we are outside, we are shunned by the community but here we are accepted. Even with the staff here. There's no caste difference." (#19)

**3.2.3 Recreation, Activities and Vocational Training—**The positive environment and the relationships among patients and staff have been developed in part through the centre's emphasis on organizing pleasurable rather than punitive activities. The staff frequently transports patients to a park or other outdoor venue where they can participate in team-building exercises or relax. Vocational training seeks to teach patients skills applicable to life outside the centre. These activities serve as opportunities to concentrate their energies towards healthy activities that reduce thoughts about drugs.

> "It's the best here…The environment here is good like there are parks and a pond as well as other activities like karaoke, football and others." (#13)

> "The activity I like most is *poco-poco*…I also enjoy *futsal* [football]. I am also taught to cook, garden, for example, mustard, watermelon. Sewing is also taught here." (#9)

> "The communication and psychosocial [programs]…teach me to speak well. I used to be afraid to talk, [had] no confidence. [Before,] to become confident, I took drugs first." (#10)

During their discussion of the freedom and range of activities at the centre, patients acknowledged the C&C program contrasted strongly with that at the former CDDCs, where they found the methods to be ineffective and punitive.

> "It's very different [at the Pusat Serenti] because you live there with a court-ordered life, caged, stressed. In terms of recovery, I don't think it's very good there. It's different from the C&C. It's freer here, even though you're actually living under control. You can go to the mosque and there are plenty of activities. It's very comfortable here." (#3)

> "I do not believe in Pusat Serenti… I was locked in like in jail, there's no knowledge or treatment given." (#8)

> "The control [at the Pusat Serenti] was not good, it was easy to get stuff…When I was at Pusat Serenti, it did not affect me, because I always thought about drugs and I was not ready to stop using yet. That's why I left and started taking drugs again." (#1)

**3.2.4 Religious Instruction—**Many patients criticized the strict focus on religion for treatment in programs they attended prior to the C&C for drug rehabilitation. Patients frequently reported that these programs were ineffective and relapse was common.

> "At Pusat Serenti, there is no treatment. I just live there and follow the *halaqa* (religious lecture) program." (#7)

> "I underwent treatment at an Islamic school in Thailand for 2 months. After I left, I met my friends and immediately started taking drugs again." (#3)

Patients seemed more likely to support the religious program at the C&C, however, because it is offered with other C&C treatment options and services, unlike at the CDDCs where it was the centerpiece for the program.

> "The best treatment here for me is the spiritual one. I believe that Allah will help me on my recovery if I always stay close to Him and follow Him… [I would suggest there] be more spiritual sessions to strengthen the relationship with Allah." (#4)

> "I do not believe in [PS]. Because yes there was *halaqa* [religious instruction], but there were no psychosocial [services] like here…[*Halaqa*] is much better here." (#8)

### 3.3 Healthcare Access and Utilization

Recent documentation of CDDCs confirm an absence of access to even basic health services (Fu et al., 2012). By design, the C&C sought to integrate its drug addiction treatment services to improve the overall health patients. Moreover, unlike CDDCs, the voluntary nature of the C&C allows patients to seek out care for diseases like HIV and tuberculosis, both common comorbidities for both C&C and CDDC patients, especially given the proportion of PWIDs present. Unlike the CDDCs, the C&C has a nearby medical clinic where patients can be referred to see a doctor and receive medical care. Patients reported satisfaction with their improved assistance with accessing healthcare and in their health since coming to the C&C. Indeed, seeking better health outcomes overall may be an important reason that drug users initially seek substance abuse treatment and remain in the C&C program.

> "Now, there is a service here that allows me to go to the [nearby medical] clinic… because they prioritize the patients from the C&C, I don't have to wait long to get treated at the clinic." (#6)

> "Now, I take care of my health and I am under hospital care and take HAART medication. I have been taking it for 6 months and I started taking it when I was undergoing treatment here. Praise be to God, my CD4 levels are rising and my health is getting better." (#4)

> "[Before coming to the C&C], my health was affected because I didn't take care of my daily needs. I didn't bathe, didn't change, hung out at dirty places. It was easy to get infected. It's different now, though. My life is in control and there is a clinic [nearby] which makes it easy for me to check my health." (#5)

While there is an on-staff pharmacist, there is no on-site primary care doctor, and comprehensive treatment or medical examination requires going to a nearby clinic. Patients repeatedly suggested that the centre should acquire a doctor to make comprehensive exams and medical prescriptions easier to acquire.

> "If I could ask that there be a doctor here, it would be easier for everyone who wants to get a more detailed treatment." (#7)

### 3.4 Outlook About the Future

While patients are satisfied with their improvement, they express uncertainty about their future, and understand that many challenges lay ahead in order to achieve the full recovery they desire. A significant concern is that after leaving the centre and returning to their homes, they will again be surrounded by the same peers and environment that originally fueled their addiction.

> "I feel afraid [about] when I get out. Afraid that I'm not strong enough because at my village, there are many people who take methamphetamines and it is easily acquired. I am planning to get my family's permission to work outside of Kelantan. I want to be far away from my old friends who will influence me into taking drugs again. I hope to be able to live a normal life outside." (#3)

> "I am ready to face the temptations outside. But I'm still worried I might fall to what I was like before. I always have to be careful and remember. And always fill my time with sports and things." (#9)

Relapse is not just a fear, but also a reality for some patients who completed the program, only to relapse and return to the C&C to attempt the treatment program again. The C&C, however, has retained flexibility in their program so that patients are not discharged before they are prepared. The standard program is three months long, but can be extended to suit the individual needs of patients.

> "The residential capacity needs to be increased…3 months is not enough. (#19)

> "The package in C&C is only 3 months but I extended my sessions to 5 months. I continued the package because I'm still not confident that I can handle the challenges of the outside world. After I complete 5 months here, I'm ready to continue with my life outside." (#4)

## 4. DISCUSSION

The C&C model represents a marked change from the several-decades-old proscriptive system of incarceration and forced rehabilitation in Malaysia. The C&C approach builds on the concept of therapeutic communities (De Leon, 1995; De Leon, Sacks, Staines, & McKendrick, 2000) but incorporates a holistic, multimodal approach to the complex facets that complicate substance use disorders, including both inpatient and outpatient treatment

along with OST and provision of nascent onsite healthcare. As a first step towards understanding if this new C&C program is effective, acceptability is one eight elements used to confirm feasibility (Bowen et al., 2009). In this exploratory study, patients identified the integration of pharmacological treatment, healthcare provisions, psychosocial services, religious instruction, and recreational activity as a potential key success of this model. This integration of services provides important insights into future treatment options in Southeast Asia and may serve as a model for other countries in the region that are seeking to transition from CDDCs. Though the contribution of patient preferences on treatment outcomes has been inconclusive for clinical outcomes in several trials (Brewin & Bradley, 1989; Cooper, Parkin, Garratt, & Grant, 1999; Kitchener et al., 2004; Noel et al., 1998; O'Connor et al., 2009; Rokke, Tomhave, & Jocic, 1999), patient preferences are increasingly being incorporated into the treatment landscape (Department of Health, 2008) and clinical research (Brewin & Bradley, 1989; King et al., 2005; McPherson et al., 1997; Torgerson et al., 1996) since patients who actively make choices in their healthcare feel empowered to adhere to treatment (Bezreh, Laws, Taubin, Rifkin, & Wilson, 2012).

OST is an evidence-based, cost-effective strategy for substantially reducing opioid use and transmission of HIV and other communicable diseases; it also improves overall health (WHO, 2009b). Stigma towards PWIDs (Earnshaw et al., 2014; Jin et al., 2014) and treatments like OST (Amato et al., 2005; Bachireddy et al., 2011; Mattick et al., 2009; Wickersham, Marcus, et al., 2013; Wickersham, Zahari, et al., 2013), is pervasive in Malaysia and may serve as a barrier towards effective treatment, as evidenced by negative attitudes by patients toward OST (Bachireddy et al., 2011) and discrimination against PWIDs by the country's next generation of clinicians (Earnshaw et al., 2014; Jin et al., 2014). Despite OST's recent introduction in Malaysia in 2005, C&C patients generally supported it, perhaps because it was integrated into the program from its inception. Wider acceptability of OST, however, will likely require more flexible dosing, which has increased acceptability and retention elsewhere (Perez de los Cobos et al., 2004).

With the rising problem with ATS in Malaysia (Mazlan, Schottenfeld, & Chawarski, 2006), particularly along the Thai border and the lack of evidence-based pharmacological treatments available to treat it, the structuring of the C&C to provide integrated, milieu and multi-modal treatment is well-positioned to address this problem, including polysubstance drug users who have multiple social and medical comorbidities (De Leon et al., 2000; Sylla, Bruce, Kamarulzaman, & Altice, 2007). Psychiatric comorbidity has been documented as especially high among PWIDs in Malaysia (Zahari et al., 2010), yet integration of mental health services is typically lacking (Davidson & White, 2007), and if not addressed, could result in decreased substance abuse treatment retention (Bradizza, Stasiewicz, & Paas, 2006).

Though religious instruction per se has not been associated with treatment outcomes, spirituality continues to play a role in substance abuse treatment (Geppert, Bogenschutz, & Miller, 2007). One U.S. study found that those who believed spirituality was important in their behavioral change were twice as likely as those who did not to achieve long-term (5 years) abstinence from heroin and cocaine (Flynn, Joe, Broome, Simpson, & Brown, 2003). The supportive role of spirituality, including in abstinence-based treatment, is associated

with decreased stress in drug users (Arévalo, Prado, & Amaro, 2008), but spirituality may also serve as a source of personal strength that maintains harm reduction practices (Arnold, Avants, Margolin, & Marcotte, 2002), more optimistic life orientation, greater resilience to stress, and less anxiety (Pardini, Plante, Sherman, & Stump, 2000). Social support, whether through spirituality or from a social network of peers, family and staff who promote pro-social behaviors, have been associated with reductions in relapse (Flynn et al., 2003). The C&C patients perceived religious instruction and peer support quite differently from their previous experiences in CDDC, and important to their recovery, perhaps in part because the religious involvement was voluntary and peers at the C&C were seeking the same goals. Regular exercise similarly can help decrease cravings and improve abstinence from drugs (Lynch, Peterson, Sanchez, Abel, & Smith, 2013), and it is no surprise that the C&C patients were satisfied with having recreational activities included (Scorzelli, 1988).

Also important for patient satisfaction was the nascent, but supportive provision and referral to nearby medical services, which represents a response in policy to increase in communicable diseases among incarcerated drug users (WHO, 2009a). A recent study assessing latent tuberculosis infection (LTBI) at the country's first C&C in Kuala Lumpur not only demonstrated a markedly high LTBI prevalence among patients, but also had high participation in the study, speaking to patients' interest in learning more about their health (Al-Darraji et al., 2013). Results from this assessment support that evolution of C&Cs should expand access to medical treatment and add more medical staff.

Qualitative findings from this exploratory study demonstrate high patient satisfaction from the newly emerging C&C centres. Metrics are needed, however, to identify the most effective aspects of C&C centres on substance abuse treatment outcomes as well as the most popular aspects. Longitudinal and periodic urine toxicology testing, assessment of social networks and social support, and accounting of future criminal justice involvement are needed to track patient outcomes over an extended period to measure reintegration into home communities and families with consideration for long-term boosters that address ongoing treatment needs for a chronic condition like substance use. This evidence of the effectiveness of the C&Cs from multiple perspectives will influence sustained policy transition in Malaysia.

Though the findings from this exploratory assessment provided important insights into the satisfaction and improved health perceived by C&C patients, the study is not without its limitations. Most recruited participants had primarily "succeeded" in treatment and may not have provided the full range of patient perspectives. Future studies might consider a longitudinal assessment. While extended discussion occurred for topics such as OST, recreational activities, community support, and access to healthcare, less discussion on religious instruction and psychosocial programs were available. Despite these limitations, important aspects of treatment satisfaction were evident that supports the continued transition from CDDCs to C&Cs, especially since many who were interviewed had experienced both.

## 5. CONCLUSION

The Cure and Care model represents an important shift in Malaysian drug policy with evidence of transition from CDDCs with detention and forced rehabilitation. Thus far, 10 of the 28 national CDDCs have been closed (Fu et al., 2012) and are now being replaced with C&C Centres. This exploratory study of the C&C in Kota Bharu provides insights into patient preferences and perspectives on available centre services. Overall, patients report favorable treatment outcomes. Importantly, they express satisfaction with an array of integrated programs that have traditionally not been provided together, like OST and therapeutic communities. Important in this emerging model is the introduction of healthcare, which needs expansion for patients with complex problems seeking voluntary rehabilitation in Malaysia and throughout the region.

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## Highlights

- We examine patient satisfaction of a novel addiction treatment center in Malaysia.
- Patients report favorable outcomes in addiction management and overall health.
- Positive experiences result from integration of several interdisciplinary programs.
- The voluntary nature of services encourages patient receptiveness to treatment.
- The supportive environment of the centre promotes program adherence.

## Table 1

Qualitative Interview Field Guide, English Translation

| | |
|---|---|
| **Introduction** | |
| **1** | RA introduces himself. |
| **2** | Icebreaker questions: Allow interviewee to introduce himself. |
| **Family and Social Roles** | |
| **3** | How close are you to your family? |
| **4** | How did your family react to you beginning treatment at the C&C? What role, if any, does your family play in the treatment process? |
| **Past Drug Use History** | |
| **5** | When did you start doing drugs? Can you talk about what influenced you to start doing drugs and your attitude towards them when you started using them? |
| **6** | What are the positive impacts of drug use and how do you maximize them? |
| **7** | What are the negative impacts of drug use and how do you minimize them? |
| **8** | Can you talk about your use of drugs before seeking treatment for addiction? |
| **Motivations to Seeking Treatment for Drug Addiction** | |
| **9** | What made you decide to seek treatment for drug addiction now at the C&C? |
| **10** | How might drug use have affected your family/social life, work, health, etc? |
| **11** | Were your family and friends a source of support or discouragement in seeking treatment? Elaborate. |
| **12** | What problems/obstacles did you face seeking the treatment? Elaborate. |
| **Experience at C&C** | |
| **13** | How did you find out about the C&C center? |
| **14** | What made you decide to try treatment at the center? |
| **15** | Tell me about your experience with the C&C center. |
| *Efficacy of Treatment* | |
| **16** | Do you believe the treatment is effective and how so? Which treatment services are the best? |
| **17** | What are the positive and negative aspects of your treatment? |
| *Changes in Health Status* | |
| **18** | How have your addiction and your health changed from when you first began treatment here? |
| **19** | How have you changed socially and mentally from when you first began treatment here? |
| **20** | Did you ever try to seek treatment before coming to the C&C center? What was your opinion of the treatment? If you have been in a PUSPEN/CCDU program, please talk about your experience with it. |
| **21** | How does the C&C compare to these other types of drug addiction therapy that you have experienced? |
| *Treatment Adherence, Healthcare Retention* | |
| **22** | How well are you following the treatment instructions you are given? |
| **23** | What makes it easy or difficult to follow the treatment? |
| **24** | How easy is it to keep your appointments? What challenges do you face coming for your appointments (no car, work hours, distance, location, etc.)? |
| *Satisfaction with C&C* | |
| **25** | What do you like most about the center? Can you elaborate on these points? |

| | |
|---|---|
| **26** | What did you not like about the center? Could anything be improved? Please elaborate on these points. |

**Perceptions of Drug Addiction Treatment**

| | |
|---|---|
| **27** | Before you began seeking treatment, how did you view other people who received drug addiction treatment? How has this view changed, or not changed now that you have experienced treatment yourself? |
| **28** | How do you balance your work with treatment? Have you been in danger of losing your job after you began treatment? Did you feel more or less secure at your job after seeking treatment? |
| **29** | Do your colleagues know you are seeking treatment for drug addiction? How would, or do, they react if they knew? |
| **30** | How would you react now if you found out a colleague or a close friend was in drug rehabilitation therapy? |
| **31** | Is there anything else that you would like to add? |

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**Table 2**

Patient Characteristics

| Participant Number | Age (Years) | Patient Status | Self-reported Comorbidities | Drug of Choice | Daily Methadone Dosage (mg) |
|---|---|---|---|---|---|
| 1 | 36 | Outpatient | HIV, TB, HCV, Depression | Opioids | 50 |
| 2 | 20 | Inpatient | None | Syabu, Meth, Ice | N/A |
| 3 | 21 | Inpatient | None | Pil Kuda* | N/A |
| 4 | 41 | Outpatient | HIV, TB, HCV | Opioids | N/A |
| 5 | 50 | Outpatient | HIV, HBV, HCV, Hypertension | Opioids | 120 |
| 6 | 41 | Outpatient | HIV, TB, HBV | Opioids | 21 |
| 7 | 45 | Outpatient | HIV, HCV | Opioids | N/A |
| 8 | 36 | Outpatient | None | Opioids | N/A |
| 9 | 18 | Outpatient | Asthma, Depression | Pil Kuda* | N/A |
| 10 | 32 | Outpatient | HCV, Depression | Opioids | 90 |
| 11 | 30 | Inpatient | HCV | Opioids | 60 |
| 12 | 24 | Outpatient | None | Pil Kuda* | N/A |
| 13 | 38 | Inpatient | Asthma | Opioids | N/A |
| 14 | 22 | Outpatient | None | Pil Kuda* | N/A |
| 15 | 28 | Inpatient | HBV | Opioids | 50 |
| 16 | 20 | Outpatient | Asthma | Pil Kuda* | N/A |
| 17 | 23 | Inpatient | None | Pil Kuda* | N/A |
| 18 | 30 | Inpatient | Asthma | Pil Kuda* | N/A |
| 19 | 29 | Inpatient | HCV | Opioids | N/A |
| 20 | 43 | Peer Support | None | Opioids | 2.5 |

*Pil Kuda is an amphetamine-type substance