

A Mixed-Methodology Analysis on the Effectiveness of Drug Cure and Care Rehabilitation Center in Malaysia

Analisis Menggunakan Kaedah Penyelidikan Campuran Terhadap Keberkesanan Pusat Pemulihan Rawatan dan Penjagaan Dadah di Malaysia

MOHD RAMLAN MOHD ARSHAD*, AIZAT KHAIRI, NOR SUZYLAH SOHAIMI

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ABSTRACT

Malaysia is experiencing a troubling increase in drug addiction, highlighting an immediate necessity to assess and enhance national rehabilitation systems. This study seeks to assess the effectiveness of these institutions by examining three essential factors: the personal perspectives of individuals in recovery, the level of familial support they receive, and the degree of governmental assistance provided. The research utilizes a mixed-methods strategy, including methodological triangulation to cross-verify data and bolster the validity of the findings. The analysis employed a cross-sectional sampling method, gathering 133 survey questionnaires from patients currently receiving treatment for substance dependence at a rehabilitation facility. Comprehensive interviews with specialists in drug crime prevention and treatment augmented this quantitative data, yielding subtle qualitative observations. The comprehensive study indicates a significant positive link among the three evaluated factors including client viewpoints, family support, and governmental assistance and the perceived efficacy of treatment programs for drug users. The research findings are expected to provide a valuable, evidence-based resource for various stakeholders. It provides specific domains for program improvement and resource distribution for politicians and agencies implementing anti-drug programs. It points out the vital role of psychosocial support for the wider community and families impacted by addiction. This study seeks to integrate these elements to enhance comprehensive and effective methods for addressing drug-related offenses and sustainably eradicating drug dependency throughout Malaysia.

Keywords: Drugs, Drugs Addiction, Drugs Crime, Drugs Rehabilitations, Drugs Treatment

ABSTRAK

Malaysia kini sedang mengalami peningkatan yang membimbangkan dalam kes ketagihan dadah, sekaligus menekankan keperluan segera untuk menilai dan memperkukuh sistem rehabilitasi negara. Kajian ini bertujuan menilai keberkesanan institusi-institusi tersebut dengan meneliti tiga faktor penting: perspektif peribadi individu dalam pemulihan, tahap sokongan keluarga yang diterima, dan tahap bantuan kerajaan yang disediakan. Penyelidikan ini menggunakan strategi kaedah campuran, termasuk triangulasi metodologi untuk mengesah-silang data dan meningkatkan kesahihan dapatan. Analisis menggunakan kaedah persampelan keratan rentas dengan mengumpul sebanyak 133 soal selidik daripada pesakit yang menjalani rawatan untuk ketagihan bahan di sebuah fasiliti rehabilitasi. Data kuantitatif ini ditambah dengan temu bual mendalam bersama pakar dalam pencegahan dan rawatan jenayah dadah, yang memberikan pemerhatian kualitatif yang lebih bernuansa. Kajian komprehensif ini menunjukkan kaitan positif yang signifikan antara ketiga-tiga faktor yang dinilai iaitu pandangan klien, sokongan keluarga, dan bantuan kerajaan terhadap persepsi keberkesanan program rawatan untuk pengguna dadah. Dapatan kajian diharapkan dapat menjadi sumber berasaskan bukti yang bernilai untuk pelbagai pihak berkepentingan. Ia menyediakan domain khusus untuk penambahbaikan program dan pengagihan sumber bagi pihak pembuat dasar dan agensi yang melaksanakan program anti-dadah. Bagi komuniti lebih luas dan keluarga yang terjejas oleh ketagihan, kajian ini menekankan peranan penting sokongan psikososial. Secara keseluruhan, kajian ini bertujuan menyatukan elemen-elemen tersebut bagi membangunkan pendekatan yang lebih holistik dan efektif dalam menangani jenayah berkaitan dadah serta membasmi ketagihan dadah secara mampan di seluruh Malaysia.

Kata kunci: Dadah, Ketagihan Dadah, Jenayah Dadah, Pemulihan Dadah, Rawatan Dadah

INTRODUCTION

Drug addiction poses a significant threat to the welfare and stability of a nation. Therefore, it is imperative to ensure the optimal functioning of the national drug treatment and rehabilitation center in order to effectively mitigate and eradicate drug addiction. Nevertheless, there is a deficiency in the medical infrastructure of drug rehabilitation institutions when it comes to the provision of comprehensive assessment, treatment, and screening services (Mitchell & Goldberg, 2023). The absence of a definitive cure and the limited effectiveness of rehabilitation programs present significant challenges in addressing drug addiction and abuse on a national scale. The lack of decisiveness in studies pertaining to cures and rehabilitation centers contributes to a rise in the prevalence of drug addiction. The prevalence of drug consumption is pervasive on a global scale, with statistical data from the United Nations (2023) indicating that around 1 in 17 individuals aged 15 to 64 engaged in drug use during the year 2021. According to the United Nations (2023), it is projected that the number of users will rise from 240 million to 296 million in 2021, constituting 5.8% of the global population within the age range of 15 to 64. The growing prevalence of drug users serves as an indicator that the efficacy of the drug addicts' treatment program within the rehabilitation facility will be contingent upon this variable. The significance lies in the quality of treatment provided to drug addicts at the rehabilitation institution (Bozarth, 2023).

Furthermore, the influence of drugs on health and healthcare systems exhibits variability. The substances known as cannabis and opioids are responsible for a significant proportion of drug use problems, and consequently, a substantial number of individuals actively seek treatment for their drug-related issues. However, it is important to note that opioids remain the most lethal substances. According to Shepard and Nugent (2023) study on drug addiction rankings across various countries, it was found that the highest percentage (46%) of nations identified cannabis as the drug with the greatest propensity to induce drug use disorders. Following cannabis, 13% of countries ranked opioids, primarily heroin, and amphetamine-type stimulants, particularly methamphetamine, as the primary drugs. The key factors influencing the ranking of drug addiction levels in each country are the prevalence of drug usage and the likelihood of developing dependency. However, it is clear that there are geographical differences in the predominant substance that people seeking drug rehabilitation services disclose. According to the United Nations (2023), opioids are the predominant primary drug in Europe and several Asian sub-regions, including Malaysia, while cocaine, cannabis, and methamphetamine are the prevailing substances in Latin America.

According to a study by Hassan Shaari and Waller (2023), people with drug addiction in Malaysia who are required to attend rehabilitation facilities exhibit a much higher likelihood of recurrence than those who voluntarily seek treatment. Empirical data back up the claim that people undergoing treatment and rehabilitation for substance use disorders have a success rate of less than 51% in finding a cure (Mitchell & Goldberg, 2022). This scenario exemplifies the ineffectiveness of mandating drug addicts attend drug detention institutions without mitigating the occurrence of relapse subsequent to their release. Moreover, Mitchell and Goldberg (2023) have reported the incidence of chronic infectious diseases, such as hepatitis B and C, as well as HIV, among drug addicts in rehabilitation facilities in Malaysia. According to research conducted in a drug treatment facility in Malaysia, the findings indicate that 86.9 percent of the individuals tested positive for tuberculin skin test (TST), while 4.6 percent tested positive for HIV. These results provide support for the importance of assessing the efficacy of drug treatment and rehabilitation centers (Jubit et al., 2023).

Furthermore, it is worth noting that within the context of Malaysia, specifically in relation to the four compulsory drug rehabilitation facilities, it has been seen that two of these facilities do not incorporate an antiretroviral medicine strategy. According to Chemi and Villoldo (2023), this particular omission contributes to the overall ineffectiveness of these rehabilitation facilities. The presence of recidivist individuals within rehabilitation facilities who have participated in treatment sessions on more than five occasions is an unforeseen occurrence. According to a study by Hassan Shaari and Waller (2023), a sizable proportion of drug users experience a worsening of their condition after leaving rehabilitation facilities. The government has tried a number of different things to address the drug use issue, but most of them have failed (Jubit et al., 2023). The suboptimal nature of the rehabilitation process prompts skepticism regarding the efficacy of rehabilitation institutions in Malaysia. Despite the legal mandate for those with drug addictions to undergo a two-year period of treatment and rehabilitation in specialized facilities, the efficacy of the treatment modules employed in these centers remains unestablished. The prevalence of addictions in Malaysia has witnessed an upward trend, as evidenced by statistical data indicating that 50 percent of individuals with addiction issues fail to achieve drug abstinence upon completion of treatment and rehabilitation programs.

The existing literature and statistical data combined illustrate a troubling scenario regarding the drug addiction issue in Malaysia, emphasizing systemic deficiencies within the mandatory rehabilitation framework. Although current research has thoroughly recorded elevated recidivism rates (Hassan Shaari & Waller, 2023), the incidence of co-occurring infectious diseases (Jubit et al., 2023; Mitchell & Goldberg, 2023), and the geographical specificity of predominant drug use (United Nations, 2023), a significant deficiency persists in integrating these concerns into a unified framework for assessing systemic effectiveness. Current research on rehabilitation frequently investigates elements such as medical protocols or recidivism in isolation, overlooking a comprehensive investigation of their interrelated effects on treatment outcomes. A notable disparity occurs in analyzing the disjunction between standardized, obligatory treatment protocols and the distinct, complex requirements of people, especially with mental health assistance, chronic disease management (e.g., HIV), and post-release reintegration. The lack of strategies for antiretroviral drugs in certain facilities is a significant operational deficiency, with its impact on efficacy and mortality remaining under-researched. The frontline viewpoints of medical personnel, counselors, and officers regarding resource constraints, training deficiencies, and procedural obstacles are insufficiently examined. Comprehending these operational and perceptual disparities is crucial for advancing from merely recognizing problems to formulating targeted, evidence-based solutions.

This study is guided by a set of interconnected objectives designed to comprehensively evaluate and improve the Malaysian mandatory drug rehabilitation system in light of identified shortcomings. The major objective is to provide a comprehensive evaluation of the existing architecture, resources, and treatment approaches in national rehabilitation centers, analyzing the three components of medical care, psychological support, and reintegration planning. This research aims to identify the essential systemic and operational obstacles hindering effectiveness, including staff readiness, insufficient resource allocation, and significant deficiencies in integrated healthcare protocols, particularly with antiretroviral medication. The project will critically examine the relationship between mandatory treatment, inherent patient motivation, and long-term recovery outcomes, specifically analyzing how this dynamic affects recidivism and post-release social integration. Ultimately, the results from various investigation avenues will be integrated to present an evidence-based, comprehensive framework for reforming the rehabilitation paradigm

itself. This framework will be tailored to the unique drug use patterns and demographic circumstances of Malaysia, aiming to replace the current cycle of failure with a more effective, compassionate, and sustainable care system.

DRUGS ADDICTION AND PREVENTIVE MEASURE IN MALAYSIA

According to concerning statistical data from Malaysia's National Anti-Drug Agency (AADK), which recorded over 495,000 addicts from 1988 to 2018, the country confronts a chronic and intricate public health epidemic. The situation is profoundly evident in the nation's Compulsory Drug Detention Centres (CDDCs), where elevated recidivism rates and a notable incidence of infectious diseases such as HIV and hepatitis underscore systemic deficiencies. To properly tackle this issue, a reformed strategy must be built on solid theoretical frameworks, incorporate evidence-based medical interventions such as Highly Active Antiretroviral Therapy (HAART), and learn from regional counterparts in Southeast Asia. The integration of the Health Belief Model (HBM) and Social Support Theory serves as a vital theoretical framework for comprehending and enhancing outcomes. A person's perceived vulnerability, severity, advantages, and barriers shape their health behaviour as suggested by HBM. In Malaysia's Compulsory Drug Detention Centres (CDDCs), the punitive framework may induce a fear of punishment but does not enhance the perceived advantages of sustained recovery or mitigate hurdles such as stigma and inadequate post-release care. Social Support Theory is essential, as the compulsory and isolated nature of CDDCs disconnects individuals from crucial social networks. Adopting voluntary "cure and care" models as suggested by Engku Mohammad Fadhli et al. (2023) would enhance therapeutic partnerships and peer support crucial for enduring behavioural change by remedying support inadequacies that contribute to relapse. A fundamental change must involve the integration and improvement of compliance with Highly Active Antiretroviral Therapy (HAART). Lee et al. (2022) illustrate that systematic, continuous counselling emphasizing medication management, side effects, and the advantages of viral suppression is the most significant predictor of good HAART adherence among People Living with HIV (PLHIV) in recovery. This corresponds with the Health Belief Model, wherein effective counselling enhances perceived advantages (a healthier life) and diminishes believed barriers (managing side effects) but the ongoing omission of certain antiretroviral therapies in select facilities is a significant failure, intensifying mortality rates and fundamentally compromising rehabilitation objectives (Chemi & Villoldo, 2023).

Data from Malaysia's National Anti-Drug Agency (AADK) indicates that the prevalence of drug misuse is substantial and increasing. In 2019, there were 142,199 documented individuals, representing an 8.7% rise over 2018. From 2008 to 2018, the cumulative count of drug abusers amounted to 230,209. From 1988 to 2018, roughly 495,000 individuals were officially recorded as addicts. Significantly, from 2008 to 2018, the predominant affected demographic, which included both new users and relapsed individuals, was aged 19 to 39. Razali et al. (2023) emphasize that substance use among Malaysian youth is widespread, with one in six adolescents and one in three young people consuming drugs such as amphetamines for enjoyment and recreation. Nonetheless, a dearth of extensive research on adolescent substance use persists in Malaysia and comparable areas. Most research predominantly separates individual and environmental variables and the identified key drivers include personal curiosity, peer influence and hedonistic tendencies (Rozmi et al., 2023). Adolescence, characterized by self-exploration and experimentation, is a key etiological determinant for the onset of substance use. In this context,

problematic drug use is characterized as the misuse of substances for recreational enjoyment or to mitigate psychological distress, rather than for therapeutic objectives. Demographic background, socialization and environment greatly influence individual behaviour (Jubit et al., 2023). Moreover, adolescents may resort to substance use as a coping strategy for numerous adversities, such as socio-political upheavals, environmental stress, economic difficulties, familial discord, peer influence, and mental health disorders (Rozmi et al., 2023).

The Ministry of Health (2023) estimates that around 60,000 adolescents in Malaysia engage in drug usage. Legislation, including the Dangerous Drugs Act (1952) and the Drug Dependence (Treatment and Rehabilitation) Act (1983), was enacted to address the critical issue of substance abuse. The latter enforces a mandatory two-year incarceration for drug users, resulting in the creation of Compulsory Drug Detention Centres (CDDCs), referred to as *Pusat Serenti* (Engku Mohammad Fadhli et al., 2023). Administered by the National Anti-Drug Agency (AADK) within the Ministry of Home Affairs, these centres are designed to offer holistic mental and physical rehabilitation (Jubit et al., 2023). Studies indicate that these facilities house about 30,000 individuals, irrespective of their gender. In response to escalating addiction, the government designated 2016 as "The Year of the Great War on Drugs," acknowledging drug usage as a widespread menace affecting all socio-economic strata (Priyatmojo, 2023). International organizations have advocated for substituting mandatory incarceration with voluntary cure and care centres as a beneficial policy enhancement for Malaysia (Engku Mohammad Fadhli et al., 2023).

In Malaysia, the legal definition of "drug trafficking" includes the production, transportation, sale, and distribution of illegal narcotics (National Anti-Drugs Agency, 2021). However, not every case of possession leads to a trafficking charge. An individual is categorized as a trafficker if caught in possession of particular threshold quantities, including 15 grams or more of heroin, morphine, or monoacetylmorphine or a cumulative total of 30 grams or more of these substances. Conviction entails stringent penalties, with at least five-year incarceration, life imprisonment, or ten lashes with a cane (National Anti-Drugs Agency, 2021). The legal framework is rigorous as growing even one cannabis plant constitutes an offense under Section 6B of the Dangerous Drugs Act 1952, subject to life imprisonment and a minimum of six lashes. The Dangerous Drugs Act 1952 (Amendment) 2002 stipulates increasing punishments for recidivist drug users. A person who relapses following two previous treatments may incur a prison sentence of 5 to 7 years and receive up to three lashes. A fourth offense results in a penalty of 7 to 13 years' imprisonment and 3 to 6 lashes. Enforcement is conducted by two principal agencies: the Narcotics Crime Investigation Department (part of the Royal Malaysia Police, PDRM) and the National Anti-Drugs Agency (AADK). The PDRM functions as the principal law enforcement agency, responding to the evolving requirements of crime prevention. AADK focuses on the treatment and rehabilitation of individuals with substance use problems. Their collaborative initiatives, involving additional government entities, NGOs, and communities, aim to improve public safety by decreasing recidivism via effective intervention. This collaboration seeks to harmonize punitive actions with rehabilitative assistance. Nonetheless, continuous and comprehensive study is necessary to detect and rectify any systemic deficiencies in this dual strategy, ensuring it properly safeguards the public and facilitates sustainable recovery.

Malaysia's drug policy exhibits regional similarities, characterized by a repressive strategy and concomitant HIV epidemics, akin to those in Thailand and Vietnam. Nonetheless, its results vary considerably. Thailand has advanced by decentralizing treatment and incorporating community-based harm reduction, enhancing HAART adherence and diminishing stigma among

people living with HIV (PLHIV) (Rozmi et al., 2023; Razali et al., 2023). Indonesia integrates rehabilitation centers with community clinics to provide continuity of post-release care, a significant deficiency in Malaysia's model (Rozmi et al., 2023; Razali et al., 2023). Effective regional models routinely shift from mandatory imprisonment to voluntary, community-based treatment. Consequently, Malaysia's policy necessitates a fundamental paradigm shift that transcends mere enforcement. Combining the Health Belief Model with Social Support Theory can transform the system by requiring HAART adherence support via organized counseling and substituting Compulsory Drug Detention Centres (CDDCs) with voluntary community care centers. Ultimately, it is crucial to regard drug dependency as a complex medical and behavioral concern, rather than merely a criminal issue, to disrupt the cycle of addiction and tackle the syndemic of drug use and infectious disease.

METHODOLOGY

This study utilized methodological triangulation, combining quantitative surveys with qualitative interviews to augment the reliability and validity of its findings regarding drug rehabilitation in Malaysia. The sampling included both purposive and convenience methods, focusing on specified, informed groups: rehabilitation patients and officers from the Royal Malaysia Police (PDRM) and the National Anti-Drugs Agency (AADK). This method is acknowledged for its cost-effectiveness and time efficiency. Out of 150 distributed questionnaires, 133 were deemed adequate for analysis, constituting a sample size within the acceptable range (30-500) for establishing reliable generalizations about the community. Semi-structured interviews were undertaken with two senior officials (Informants A and B) from the aforementioned agencies to validate and enhance these quantitative findings. These specialists provide a thorough, policy-oriented viewpoint on treatment methodologies. The triangulation method enhanced the overall understanding and validity of the research conclusions by integrating data from several sources, including rehabilitated individuals and institutional specialists.

Initially, triangulation was essential for attaining complementarity and completeness. The quantitative survey data from 133 of 150 patients at the Drug Rehabilitation Centre provided a comprehensive, generalizable summary of statistical relationships, including the correlation between family support and treatment success rates. The qualitative interviews with senior officials from PDRM and AADK provided essential depth, contextualizing the numbers with practical insights on obstacles in policy implementation, operational impediments, and the actual experiences of rehabilitation. By reconciling disparate data sources, the study could formulate more robust results. If the quantitative data suggested a limited association between government support and long-term recovery, and the qualitative interviews disclosed particular objections regarding the absence of post-release employment opportunities, the two datasets would validate one another. This convergence transforms a tentative association into a robust finding, thereby augmenting the study's overall validity. By deliberately incorporating the perspectives of those who experienced the rehabilitation process, the study obtained a vital viewpoint frequently overlooked in top-down assessments. This step guaranteed that the assessment of efficacy was not exclusively determined by authorities but was also informed by the experiences of care recipients. To ensure a rigorous, contextually informed, and representative final analysis of the complex drug recovery environment, triangulation was essential.

The complexity of the model determines the sample size requirements for the Partial Least Squares Structural Equation Modeling (PLS-SEM) technique used in this research. A commonly acknowledged guideline (Hair et al., 2019) is the "10-times rule," which mandates that the sample size must be a minimum of 10 times the highest number of structural routes directed at any single construct inside the model. The study, with 133 respondents, adequately fulfills this condition for the majority of viable model structures, guaranteeing sufficient statistical power to identify significant connections. The specialized characteristics of the research population warrant the application of non-probability sampling, particularly purposive sampling. The research specifically targeted officers from PDRM and AADK who were involved in drug prevention and rehabilitation efforts. Obtaining access to a genuine random sample of this entire population is practically challenging. As a result, purposive sampling ensured that participants possessed the necessary skills and experience relevant to the research objectives, thereby enhancing the richness and relevance of the data, despite the restricted statistical generalizability to all officers.

The qualitative study employed a systematic, three-phase coding methodology utilizing NVivo software to guarantee rigorous and transparent results. Initially, interview transcripts were imported and systematically tagged line-by-line, producing preliminary descriptive labels (e.g., Post-release Support Gap). Secondly, these codes were systematically arranged into overarching, interrelated themes by axial and selective coding, employing NVivo's node hierarchies to create categories such as Obstacles to Sustainable Reintegration. Themes were ultimately refined, and their interrelations analyzed with NVivo's query tools to discern patterns, including connections between resource limitations and treatment inefficacy. This systematic approach guaranteed the analysis was replicable and directly influenced the interpretation of the quantitative survey data, fulfilling the study's triangulation objective. Data collection was finalized following interviews with three important informants, as topic saturation was achieved the stage at which no additional insights or categories surfaced confirming the thoroughness and comprehensiveness of the qualitative results.

This study meticulously validated saturation by strategic sampling and ethical norms. Five pivotal interviewees were intentionally chosen to embody the entire rehabilitation ecosystem: enforcement officers from PDRM, treatment officers and counselors from AADK, and former clients. This guaranteed that the data encompassed all essential institutional and experiential viewpoints, demonstrating that thematic saturation was thorough and significant. Ethical integrity was of utmost importance. All participants furnished signed, informed consent subsequent to examining the study details. Survey data was collected anonymously, while interview transcripts utilized pseudonyms and excluded identifying information to maintain confidentiality. To bolster credibility, the researcher engaged in critical self-reflection, recording personal assumptions such as a possible bias against compulsory rehabilitation to deliberately pursue disconfirming facts. This reflective technique, along with open-ended interview questions, reduced prejudice and addressed power relations, ensuring a balanced and credible analysis rooted in stringent methodological and ethical standards.

RESULTS AND DISCUSSION

This section commenced with profiling the respondents involved to assess the effectiveness of cure and care rehabilitation as presented in Table 1.

TABLE 1. Profile of Respondents (n: 133)

Profile	Sub-Profile	Frequency	Percentage
Age	18 – 27	14	10.5
	28 - 37	60	45.1
	38 - 47	48	36.1
	48 and above	11	8.3
Marital status	Single	81	60.9
	Married	33	24.8
	Divorced	19	14.3
Period of treatment in Cure and Care (month)	2 – 6	28	21.1
	7 - 11	75	56.4
	12 - 16	23	17.3
	17 – 21	7	5.3
Who influences addicted people to commit drugs	Friends	94	70.7
	Family	1	0.8
	Society	12	9.0
	Others	26	19.5

Table 1 above reveals that respondents' ages range from 28 to 37 years old are the majority with a frequency of 60 (45.1%), while the lowest are those between the ages of 48 and above (11 = 8.3%). It shows a majority of respondents are youngsters. In addition, the bulk of respondents in this survey are single, with 81 persons in total. Descriptive analysis shows the majority of respondents who receive treatment between 7 to 11 months are 75 persons (56.4%)—following that are those who received therapy within 2 to 6 months (28 persons, 21.1%). There are also 23 respondents (17.3%) with a treatment term of 12-16 months; the lowest treatment time is 17 to 21 months, consisting of 7 respondents (5.3%). Table 1 also shows that most of the respondent's agreed friends are the primary influencer in becoming drug abuser (94 respondents, 70.7%) while family are the least factor (1 respond, 0.8%).

TABLE 2. Convergent Validity (SEM: PLS)

Construct	Item	Loading	CR ^a	AVE ^b
Rehab Effectiveness	Rehab1	0.816	0.932	0.694
	Rehab2	0.849		
	Rehab3	0.805		
	Rehab4	0.827		
	Rehab5	0.882		
Attitude of Addicts	Attitude1	0.903	0.955	0.809
	Attitude2	0.945		
	Attitude3	0.933		
	Attitude4	0.903		
	Attitude5	0.807		
Family Support	Family1	0.810	0.889	0.727
	Family2	0.892		
	Family3	0.854		
	Family4	0.853		
	Family5	0.854		
Government Support	Govt1	0.754	0.927	0.719
	Govt2	0.888		

Govt3	0.835
Govt4	0.898
Govt5	0.875

- a. Composite reliability = (square of the summation of the factor loadings) / [(square of the summation of the factor loadings) + (square of the summation of the error variances)]
- b. AVE = (summation of squared factor loadings) / (summation of squared factor loadings) (summation of error variances).

Next, two types of validity were examined to assess the measurement model. The first being convergent validity and the second being discriminant. Convergent validity of the measurement model is usually ascertained by examining the loadings, average variance extracted (AVE) and composite reliability (Gholami et al., 2013). The loadings were all higher than 0.6, the composite reliabilities were all higher than 0.7, and the AVE values were higher than 0.5, as Hair et al. (2014) suggested.

TABLE 3. Mutlitrait-multimethod (HTMT) (SEM: PLS)

	1	2	3	4	5
1. Rehab Effectiveness					
2. Attitude of Addicts	0.968				
3. Family Support	0.965	0.857			
4. Government Support	0.876	0.784	0.766		

Recent criticism of the Fornell-Larcker (1981) criterion was reliably detecting the lack of discriminant validity in common research situations (Henseler et al., 2015). They have suggested an alternative approach, based on the multitrait-multimethod matrix, to assess discriminant validity: the heterotrait-monotrait ratio of correlations. Henseler et al. (2015) also demonstrated this method's superior performance through a Monte Carlo simulation study. There are two ways of using the HTMT to assess discriminant validity: (1) as a criterion or (2) as a statistical test. For the first one, if the HTMT value is greater than the HTMT.85 value of 0.85 (Kline, 2016), or the HTMT.90 value of 0.90 (Gold et al. 2001), then there is a problem of discriminant validity. The second criterion, according to Henseler et al. (2015), is to test the null hypothesis (H0: HTMT \geq 1) against the alternative hypothesis (H1: HTMT < 1) and if the confidence interval contains the value one (i.e., H0 holds) this indicates a lack of discriminant validity. As shown in Table 4, all the values passed the HTMT.90 (Gold et al., 2001) and HTMT.85 (Kline, 2011).

TABLE 4. Inferential Hypothesis Testing (SEM: PLS)

Hypothesis		Std Beta	Std Error	t-value	p-value	BCI LL	BCI UL	f2	VIF
H1	Attitude of Addicts → Rehab Effectiveness	0.782	0.057	4.838	P<.001	0.187	0.376	0.125	1.52
H2	Family Support → Rehab Effectiveness	0.823	0.054	5.13	P<.001	0.216	0.428	0.152	1.734
H3	Government Support → Rehab Effectiveness	0.822	0.062	4.55	P<.001	0.174	0.379	0.128	1.534

Table 4 shows attitude of addicts ($\beta=0.782$, $p<.001$), family support ($\beta=0.823$, $p<.001$) and government support ($\beta=0.822$, $p<.001$) were positively related to political participation, thus H1, H2, H3 was supported. The R2 was 0.713, indicating that all the independent variables can explain 71.3% of the variance in cure and care rehabilitation effectiveness.

This study aims to measure the effectiveness of a cure and care rehabilitation centre, thus, the statistical analysis found that the attitude of people with addiction had a significant impact on the effectiveness of cure and care rehabilitation centres. These findings parallel a previous study by Rozmi et al. (2023), which found that care and treatment are essential to assure effective care, timely approach to safety, and continuous progress to meet the needs of substance users. The findings are also identical to the qualitative data as demonstrated by Informants:

'...cure and care rehabilitation centre [officers] always stand by the drug users to ensure the recovery process can be done [speed up]. However, the person(s) 's attitude is crucial in this process. As the authority, we can provide them with anything [procedures, documentation, medicine, etc]. But if they are reluctant to change, the process becomes difficult. However, we try our best to help them.'

(Informant A, personal communication, July 20 2023)

'We, as the drugs law enforcers, don't want the substance user to stay longer in the rehabs centre [cure and care rehabilitation centre]. They should be cured and leave the centre. In the centre, we can provide motivational talks or preaching, but the attitude of the people with an addiction is the main issue here. If one is unwilling to change, the treatment process might be longer. They need to fight their addiction at a hard level. If they could commit, we, as the anti-drugs enforcers, are happy and willing to help.'

(Informant B, personal communication, July 29 2023)

In addition, family support is vital to ensure the cure and care rehabilitation centre can operate effectively. It can be achieved by constant support from family members to ensure the convalescence process runs smoothly. A study by Jubit et al. (2023) found that drug addiction has a reciprocal impact with support from the family members by not discriminating and isolating the family member who found using drugs. Thus, the Informants portray that:

'...mother, father, siblings and all family members must be responsible if any of their relatives involved in drugs user. Being responsible [helping the family found to use drugs] is vital because no one should be left behind due to their mistakes. The centre [cure and care rehabilitation centre] does not operate like a prison. This centre always welcomes family members to be part of the recovery process for drug addicts. Even though there are rules for visitors, we encourage them to be with us here. Family members also must know about dealing with substance users. Here, at the centre, we are willing to share information. The ultimate aim is to ensure everyone in the centre is free from drug addicts. The enforcers want these drug addicts to recover at high speed so they can be with their families and start a new life. Thus, in this matter, the importance of family support is undeniable.'

(Informant C, personal communication, July 20 2023)

'...look, we are the outsiders. But we have the authority because of the source of power as stipulated in the law. However, the closest persons are the family members and close relatives. They need to ensure continuous support given to the drug users as most of the offenders involved in drugs are due to family broken. They felt the family abandoned them and did not give enough support. The youngsters might think the family does not need them anymore. Thus, they believe their friends over their family members. Unfortunately, they cannot choose between good and bad friends at a young age. It is the main reason why family support is important. Let go of the past; family and drug addicts should start a new life and rectify their past mistakes. But, I believe, without family support, it is challenging for the drug addicts to recover.'

(Informant B, personal communication, July 29 2023)

Lastly, this study found that the government, as the drug law regulator, is highly significant in ensuring cure and care rehabilitation centres can effectively combat drug addiction. It is also claimed by scholars such as Shepard & Nugent (2023), who stated that the intervention of the government in the issues of drug addicts and its prevention care treatment is important in the country. Both of the informants mentioned and described as:

'...government is the main denominator for drug addiction preventive and cure. As the higher-ranking of policymakers, government support is the main contributing factor in reducing and eliminating drug addicts throughout the country. Currently, two agencies are responsible for this matter: the Narcotics Crime Investigation Department of the Royal Malaysia Police and the National Anti-Drugs Agency. The narcotics department is responsible for planning and executing narcotics crime prevention. The Dangerous Drugs Act of 1952 is the main law used by narcotics to ensure excellence in combating drug crime in Malaysia. The Royal Malaysia Police is committed to ensuring that Section 39(b), Section 39(c) and related laws on drugs are enforced to ensure drug addicts can be eliminated. It is the main job of the police. In addition, the police force also works together with the National Anti-Drugs Agency to ensure the support needed to curb drug abuse can be provided. However, it is imperative to ensure the police force holds the authorities to deal with narcotic crimes as they have the expertise in dealing with such illegal activities.'

(Informant A, personal communication, June 20 2023)

'...no doubt, in drug crimes either, preventive and cure, government support is essential. There is nothing can be done without government instructions. As the authorities, we implement the rules of law that the government passes as the higher decision maker. But, in Malaysia, there are two scopes. The first is related to crime, and the Narcotics Department is responsible for dealing with this issue. The second is treatment and cure. This task is normally executed by the National Anti-Drugs Agency, which is responsible for ensuring the compulsory cure and care rehabilitation centre can run effectively. However, a close relationship between the Royal Malaysia Police and the National Anti-Drugs Agency is highly necessary as these two agencies is working at the national level in combating crime on drugs, including treatment.'

(Informant B, personal communication, July 29 2023)

Rehabilitation is a cooperative endeavour wherein individuals inhabit a specialized facility to regain physical health and normalcy through therapeutic interventions, frequently subsequent to substance addiction (Niraule et al., 2006). Drug Rehabilitation Centres (DRCs) are crucial for combating addiction by assisting individuals in restoring impaired abilities. To attain desired objectives, patients must foster a positive attitude towards treatment, since this perspective markedly improves recovery effectiveness and personal growth (Luoma et al., 2007). Simultaneously, self-compassion serves as an essential supportive factor, facilitating individuals in implementing behavioural change while empathetically adjusting to their new surroundings (DiClemente & Crisafulli, 2022). Recovery is characterized as a difficult, multifaceted process that entails the eradication of both physical and psychological dependence, along with a dedication to societal reintegration (Laudet, 2007). It involves attaining comprehensive well-being and effectively re-joining the community. Moreover, McCann et al. (2015) see any decrease in substance usage as advantageous for an individual's overall health and safety.

Individuals in recovery must exercise caution regarding their social circles, since external stimuli and group behaviour significantly influence personal attitudes and actions, eventually affecting the effectiveness of rehabilitation (Tompsonowski, 2003). The active participation of family is essential. Addiction frequently disrupts familial relationships, resulting in communication failures and making it extremely difficult to perform therapy. In contrast, a nurturing family environment markedly improves well-being and development. Studies indicate a robust positive association between effective family dynamics and an individual's hope (Connelly Jr., 2005), resilience (Mathiesen & Prior, 2006), and self-efficacy (Reitz et al., 2014). The active participation of family members is essential during the healing process at the institution (Mohd Ramlan & Mohd Naeim, 2023). Previous research has demonstrated a robust and affirmative correlation between family functioning and optimism (Sahin et al., 2010). Family System Theory asserts that the total well-being of individuals is intrinsically connected to the health of the family unit (Beavers & Hampson, 2000). Consequently, the implementation of family-centred preventive programs is essential. Such approaches must transcend individual rehabilitation to proactively avert future addiction. According to Ojha et al. (2002), these activities should include parental skills training, create frameworks for developing and enforcing family substance-use policies, and

offer extensive drug education. This comprehensive approach fortifies the family structure, establishing it as a fundamental element of both rehabilitation and prevention, thus tackling the relational and environmental origins of addiction.

The government is essential in addressing drug addiction, chiefly by creating and overseeing institutions such as the Cure and Care Rehabilitation Centres. The state, as the entity responsible for the well-being of society, must assume a leadership role in prevention, care, and treatment. Cooperative engagement between enforcement agencies, such as the Narcotics Crime Investigation Department, and treatment organizations like the National Anti-Drugs Agency (AADK), is crucial for a comprehensive plan that encompasses both criminal justice and rehabilitation. A comprehensive approach necessitates the active participation of families and non-governmental organizations, particularly to safeguard youth, the nation's essential human resource. A significant risk factor for substance misuse is acquisition via social networks; thus, dismantling these connections is essential. Authorities should cooperate intimately with communities to collect intelligence and may use digital applications to enhance information distribution. The probability of drug use escalates with age, reaching its zenith during adolescence and young adulthood, attributed to significant life transitions—such as the shift from education to employment that introduce environmental stressors, financial pressures, and mental health issues. These pressures frequently compel individuals to resort to substance usage as a means of coping. Therefore, comprehensive interventions must incorporate governmental initiatives, community collaboration, and focused assistance during critical life phases to effectively mitigate addiction.

An extensive examination of the rehabilitation framework in Malaysia reveals that comprehensive, evidence-based policy reform is crucial for enhancing the effectiveness of drug rehabilitation. The existing framework, which encompasses the Cure and Care Rehabilitation Centre, provides a foundation, nonetheless, significant challenges related to societal stigma, finances, and integration impede its efficacy. Policymakers ought to implement specific recommendations to create a more robust and empathetic system. A primary impediment to effective rehabilitation is the past overemphasis on punitive measures rather than treating addiction as a complex health condition. This study asserts that recovery requires the elimination of both physical and psychological dependence, yet mental health treatments are often isolated from addiction treatment. Policy must mandate the integration of dual-diagnosis treatment in all government-funded rehabilitation centres. This involves the co-location of skilled clinical psychologists and counsellors who can address underlying issues such as trauma, depression, and anxiety, which frequently contribute to substance use. Furthermore, Malaysia should accelerate the decriminalization of minor drug possession, steering individuals towards mandatory evaluation and rehabilitation instead of the criminal justice system. This aligns with global research demonstrating that decriminalization reduces stigma, encourages prompt help-seeking, and enables a more efficient reallocation of resources from incarceration to healthcare. Consequently, financial constraints constitute a major impediment, sometimes leading to overcrowded facilities and insufficient post-care services. A stratified funding strategy should be adopted to resolve this issue. The government must increase funds for the National Anti-Drugs Agency, especially for community-based rehabilitation programs. These are more cost-effective and mitigate the problem of social isolation post-therapy.

The government ought to implement a matching grant program to promote corporate sector involvement in Corporate Social Responsibility (CSR) activities focused on vocational training and job placement for rehabilitated individuals. Portion of funds seized from drug trafficking activities should be legally designated for rehabilitation and prevention services, creating a self-

sustaining funding stream for the system against the drug trade. Furthermore, cultural stigma represents a substantial obstacle, impeding individuals from seeking help and families from offering support. This study contends that an optimistic perspective can markedly enhance the efficacy of the rehabilitation process. Therefore, a thorough and lasting destigmatization program is needed. This should not be a traditional say no to drugs campaign, but rather one that individualizes the experience of addiction. These initiatives should utilize mass media and internet platforms to present recovery narratives from successful former addicts, emphasize the neurological underpinnings of addiction, and promote self-compassion as a crucial component of rehabilitation, as supported by DiClemente & Crisafulli (2022). A transition from a punitive to a healthcare-focused strategy is crucial for reforming Malaysia's rehabilitation system. Central to this initiative are government-funded family support hubs, which aim to educate relatives, enhance communication, and restore the family as a protective unit, therefore immediately alleviating the social isolation that perpetuates cycles of addiction.

Simultaneously, proactive, data-informed prevention is essential. Authorities ought to establish a centralized, anonymised analytics platform to discern drug-use trends, new drugs, and vulnerable populations. This intelligence should guide specific, localized initiatives in educational institutions and communities. The government should finance secure telehealth initiatives that provide online counselling and support, therefore diminishing the initial stigma associated with seeking assistance. Ultimately, law must formalize ongoing support. Guided by family systems theory, the licensing of rehabilitation centres should include the implementation of structured family programs, encompassing therapy and training. It is essential that policy mandates automatic enrolment in a two-year aftercare program following discharge. This program will provide monthly assessments, ongoing therapy, and crucial support for housing and employment, addressing the primary environmental factors that contribute to relapse during life transitions. This thorough, evidence-driven approach establishes a more empathetic, efficient, and sustainable route to rehabilitation.

This study offers a crucial non-Western viewpoint by situating foreign findings within Malaysia's own sociocultural and policy framework, including its cure and care rehabilitation centres. Future study should considerably expand its contribution by incorporating the frequently neglected viewpoints of Malaysians living with HIV (PLHIV) who utilize medications. This junction is crucial; a substantial percentage of HIV infections in Malaysia are linked to intravenous drug use, and UNAIDS (2022) designates individuals who inject drugs throughout the Asia-Pacific as a priority demographic with prevalence rates far surpassing those of the general population. Incorporating this demography would fill a significant void in world literature, especially concerning Southeast Asia. Their experiences underscore the significant difficulty of dual stigma—concurrent prejudice stemming from both addiction and HIV status. This stigma constitutes a significant obstacle to obtaining and maintaining both addiction treatment and HIV care, jeopardizing the comprehensive recovery and social reintegration vital for enduring well-being (Laudet, 2007). Examining the study's results via an HIV perspective amplifies the importance of its recommendations for integrated care. The imperative to tackle physical and psychological reliance must explicitly encompass the management of HIV as a chronic condition. The World Health Organization (2022) advocates for the amalgamation of services pertaining to HIV, mental health, and substance use to improve outcomes and maximize resource efficiency. The correlation between family functioning and individual hope/resilience is particularly significant for PLHIV, since familial support is essential for medication adherence and overall quality of life. Consequently, to enhance its efficacy, the study's implications must promote

specific policy measures. Policymakers must require the incorporation of HIV testing, counselling, and treatment in all government-funded drug rehabilitation centres in accordance with WHO/UNAIDS best practices to address this issue. Secondly, healthcare models in these centres must integrate evidence-based, trauma-informed counselling specifically designed for people living with HIV who use drugs. Ultimately, specialized training for personnel is crucial to address dual stigma and cultivate the self-compassion required for rehabilitation. Concentrating on Malaysian PLHIV would offer practical suggestions for the implementation of integrated, stigma-free care models in analogous circumstances, ultimately improving both national policy and global public health practices.

CONCLUSION

Please ensure that the conclusion critically sums up the study succinctly and meets the word requirement. It should also be tied in with the literature review. The objective of this study was to ascertain a statistically significant correlation and non-statistical influence between the many factors that contribute to the efficacy of a rehabilitation facility. Assessing the efficacy of cure-and-care rehabilitation institutions is a pertinent endeavor. The analysis of the data demonstrates that the attitudes of individuals struggling with addiction, the level of support from their families, and the availability of government help collectively exert a notable influence on the effectiveness of a cure and care rehabilitation facility. Moreover, the primary objective of this investigation was to ascertain effective strategies for facilitating comprehensive therapeutic interventions for individuals with substance use disorders within a rehabilitation facility, thereby aiding their recovery from drug addiction. Additionally, the goal of this study is to assess how well the rehabilitation facility's treatment protocol is working and how much support relevant stakeholders are giving those struggling with addiction.

Individuals who engage in drug misuse exhibit human characteristics and emotions that warrant consideration, in addition to the underlying factors contributing to their drug use. The rationale behind this proposition is the potential for individuals grappling with addiction to make valuable contributions to the social and economic progress of the nation, contingent upon their successful recovery. Consequently, researchers assume pivotal responsibilities in ascertaining the requirements and efficacious therapeutic protocols necessary for individuals with addiction to achieve recovery from substance abuse and overcome the obstacles they face in life. Moreover, this study holds significant importance for the researchers, as they will assume the role of future policymakers responsible for making informed policy decisions. A comprehensive examination of the effects and ramifications of rehabilitation institutions on the process of drug addiction recovery is warranted. Consequently, this study aids researchers in assessing the efficacy of the cure and care rehabilitation centre in Malaysia in facilitating preventive care therapy for individuals with substance abuse issues.

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BIODATA OF AUTHORS

Mohd Ramlan Mohd Arshad (Corresponding Author)
Faculty of Administrative Science and Policy Studies,
Universiti Teknologi Mara (UiTM), Seremban, Negeri Sembilan
Email: mramlan2957@uitm.edu.my

Aizat Khairi
Faculty of Social Sciences and Humanities,
Universiti Kebangsaan Malaysia (UKM) Bangi, Selangor
Email: zat@ukm.edu.my

Nor Suzylah Sohaimi
School of Government, College of Law,
Government and International Studies,
Universiti Utara Malaysia (UUM) Changlun, Kedah.
Email: suzysohaimi@uum.edu.my