Perceived Effectiveness of Methadone Treatment at a Community Treatment Site in Penang, Malaysia: A Qualitative Study

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ABSTRACT

Methadone treatment is an established harm-reduction intervention for individuals with opioid dependence and is intended to reduce illicit opioid use and associated health and social harms. This study explored the perceived effectiveness of the Methadone Treatment Programme receiving treatment at Community Care House (CCH), Jalan Scotland, Penang, Malaysia, with particular attention to opioid dependence, treatment acceptance, harm reduction, and social functioning. A qualitative phenomenological approach was employed. Eight male Malay participants aged 26–56 years who had undergone methadone treatment for approximately one to six years at Community Care House, Jalan Scotland, Penang, were purposively selected. Data were collected through interviews and analysed using thematic analysis. Participants generally perceived methadone treatment as beneficial in managing their dependence on opioids. Four dimensions of perceived benefit emerged: improved ability to work, perceived reductions in illicit opioid craving and reliance on illicit opioids, financial savings, and improved life circumstances. Participants also described harm-reduction benefits associated with avoiding injecting practices and needle sharing, although views regarding the programme's role in preventing infectious diseases were not unanimous. Acceptance of treatment was associated with its perceived helpfulness, accessibility, affordability, and ability to support employment. Nevertheless, one participant expressed concern about becoming dependent on methadone over the long term. Participants further reported improvements in social functioning, particularly in employment, family and community relationships, and personal stability. The findings suggest that participants experienced methadone treatment as more than a pharmacological intervention; participants also associated it with aspects of social reintegration and everyday functioning. Integrating psychosocial and social-work support with methadone treatment may therefore strengthen recovery-oriented outcomes for people experiencing opioid dependence.

Keywords: methadone treatment; opioid dependence; harm reduction; social functioning; qualitative research

INTRODUCTION

Opioid dependence is a complex health and social issue that can affect not only individuals who use opioids but also their families, communities, employment, health, and social functioning. The consequences associated with opioid use may extend beyond dependence itself and include increased risks of overdose, infectious diseases, financial difficulties, disrupted relationships, social marginalisation, and difficulties maintaining stable employment and everyday responsibilities (World Health Organization [WHO], 2025a; Yahaya et al., 2026). These interconnected consequences highlight the need for interventions that address both the physiological dimensions of opioid dependence and the broader psychosocial circumstances surrounding treatment and recovery (Carlisle et al., 2023; WHO, 2025b).

Harm reduction provides an approach to addressing drug-related problems by seeking to minimise adverse health and social consequences rather than relying solely on immediate abstinence. Within this framework,

opioid agonist treatment, including methadone maintenance treatment, represents an established intervention for opioid dependence (WHO, 2025a, 2025b). Methadone is a long-acting opioid agonist that can reduce withdrawal symptoms and opioid craving, thereby supporting individuals in reducing or discontinuing the use of illicit opioids. Continued access to opioid agonist treatment is also important because disruption or discontinuation of treatment may increase vulnerability to relapse and other opioid-related harms (Thakrar et al., 2023; WHO, 2025b). Consequently, methadone treatment should be understood not simply as the substitution of one opioid for another, but as part of a structured harm-reduction and recovery strategy.

In Malaysia, the Methadone Treatment Programme forms part of the country's harm-reduction response to opioid dependence and associated health risks. Methadone Maintenance Therapy (MMT) was introduced nationally in 2005 and has subsequently become an important component of efforts to address opioid dependence and harms associated with injecting drug use (Yahaya et al., 2026). The programme has particular relevance to reducing reliance on illicit opioids and behaviours such as injecting and needle sharing that can increase exposure to blood-borne infections. Malaysian evidence also suggests that the potential benefits of methadone treatment extend beyond the management of opioid use. Baharom et al. (2012), for example, reported improvements in physical health, psychological well-being, social relationships, and environmental quality of life among individuals retained in methadone treatment. More recent Malaysian research has similarly identified reduced cravings, improved functioning, return to employment, and social reintegration as important perceived outcomes of MMT (Yahaya et al., 2026).

However, evaluating methadone treatment solely according to reductions in illicit opioid use or associated health risks may overlook important dimensions of recovery. For individuals receiving treatment, effectiveness may also be reflected in their ability to work, manage their finances, maintain family relationships, participate in community life, and resume valued social roles (Baharom et al., 2012; Yahaya et al., 2026). Treatment engagement itself may be influenced by accessibility, affordability, treatment requirements, stigma, and the compatibility of treatment with employment and other everyday responsibilities (Carlisle et al., 2023; López-Castro et al., 2024; Thakrar et al., 2023). These findings indicate that treatment effectiveness needs to be considered within the broader social and organisational contexts in which individuals experience recovery.

From a social-work perspective, these dimensions are particularly important because recovery involves the restoration of social functioning alongside the management of substance dependence. Individuals experiencing opioid dependence occupy multiple roles within families, workplaces, and communities, and disruption to these roles may contribute to social isolation and marginalisation. Conversely, improved employment, financial stability, family relationships, and community participation may represent meaningful indicators of recovery and social reintegration (Baharom et al., 2012; Yahaya et al., 2026). Nevertheless, individuals receiving methadone may continue to encounter stigma and negative perceptions even when treatment has enabled them to achieve greater stability. Research has demonstrated that stigma can arise within healthcare systems, treatment settings, families, and wider social environments, potentially affecting treatment experiences and opportunities for successful reintegration (Carl et al., 2023; Carlisle et al., 2023). These challenges reinforce the relevance of psychosocial and social-work support alongside pharmacological treatment.

Despite growing evidence regarding methadone treatment, there remains value in examining how individuals receiving treatment themselves understand its effectiveness within specific Malaysian social and community contexts. Existing research has frequently examined clinical outcomes, quality of life, treatment retention, or perspectives from family members (Baharom et al., 2012; Baharuddin et al., 2025; Yahaya et al., 2026). While these perspectives provide important evidence, they may not fully capture how individuals receiving methadone interpret changes in their own daily lives, relationships, employment, financial circumstances, and community participation. Qualitative investigation can therefore complement clinical and quantitative measures by providing greater insight into the lived experiences and meanings that individuals associate with methadone treatment.

Accordingly, this study aimed to explore the perceived effectiveness and lived experiences of methadone patient receiving treatment at Community Care House (CCH), Jalan Scotland, Penang, Malaysia. Specifically, the objectives were to explore (1) participants' perceptions of changes in illicit opioid craving and use and

related health risks; (2) perceived benefits, treatment acceptance, and practical considerations, including accessibility, affordability, and concerns about long-term methadone use; and (3) participants' experiences of everyday social functioning, including employment, financial circumstances, and family and community relationships. These objectives concern participants' accounts and interpretations rather than measurement of clinical effectiveness or causal reductions in opioid dependence.

LITERATURE REVIEW

Opioid Dependence and the Harm Reduction Approach

Opioid dependence is a complex health and social condition associated with substantial physical, psychological, and socioeconomic consequences. Beyond dependence itself, opioid use can increase the risk of overdose, premature mortality, HIV, viral hepatitis, and other health complications, particularly when opioids are injected using shared equipment. The World Health Organization (WHO, 2025a) identifies opioid-related overdose and infectious diseases such as HIV and viral hepatitis as major contributors to mortality among people who use opioids. These consequences demonstrate that responses to opioid dependence need to extend beyond abstinence and incorporate interventions that reduce immediate health and social harms while supporting longer-term recovery and treatment engagement.

Harm reduction provides such a framework by seeking to minimise the adverse health and social consequences associated with drug use while recognising that recovery pathways vary between individuals. Opioid agonist maintenance treatment (OAMT), particularly with methadone or buprenorphine, is a central component of this approach. WHO (2025a, 2025b) recognises OAMT as an evidence-based intervention associated with reductions in non-medical opioid use, mortality, morbidity, HIV and hepatitis C transmission, risky behaviour, crime, and social costs, while also improving treatment retention and overall well-being. Harm reduction therefore positions treatment effectiveness within a broader framework that includes health, safety, quality of life and social stability rather than measuring success solely through abstinence.

Methadone Treatment for Opioid Dependence

Methadone is a long-acting opioid agonist widely used in the treatment of opioid dependence. When administered at an appropriate therapeutic dose, methadone can reduce opioid withdrawal symptoms and craving and provide greater physiological stability, thereby reducing reliance on illicit opioids. Contemporary WHO recommendations identify opioid agonist treatment with methadone or buprenorphine as the treatment option supported by the strongest evidence for most individuals with opioid dependence (WHO, 2025a). Importantly, methadone treatment should not be viewed simply as substituting one opioid for another; rather, it represents a structured therapeutic intervention intended to stabilise individuals and reduce the health and social harms associated with uncontrolled opioid use.

Treatment retention is particularly important because the benefits of methadone are closely associated with continued engagement in treatment. WHO (2025b) emphasises that interruption of opioid agonist treatment can expose individuals to withdrawal, relapse and other serious harms, supporting the need for reliable and continuous access to treatment. Evidence from Malaysia has similarly demonstrated improvements extending beyond opioid consumption. For example, a Malaysian longitudinal study reported significant improvements in physical health, psychological well-being, social relationships and environmental quality of life among patients retained in methadone maintenance treatment for six months (Baharom et al., 2012). These findings indicate that the effectiveness of methadone treatment may be reflected in broader improvements in quality of life and everyday functioning.

Methadone Treatment and Harm Reduction in Malaysia

Malaysia introduced Methadone Maintenance Therapy (MMT) nationally in 2005 as part of its response to opioid dependence and harms associated with injecting drug use. The programme represented an important transition towards a public-health-oriented harm-reduction approach. Malaysian evidence has subsequently demonstrated positive outcomes associated with methadone treatment, including improvements in quality of life and treatment retention. Earlier longitudinal evidence found significant improvements across physical,

psychological, social-relationship and environmental domains among Malaysian patients who remained in treatment (Baharom et al., 2012). More recent Malaysian qualitative research has similarly identified reduced cravings, improved stability, restored social roles and return to employment as perceived benefits of MMT (Yahaya et al., 2026).

The Malaysian experience is particularly relevant because opioid recovery takes place within family, community and cultural contexts rather than exclusively within clinical settings. Yahaya et al. (2026), in a qualitative study involving immediate family members of Malaysian MMT clients, found that families associated treatment with restored functionality, improved emotional regulation, reduced opioid-related problems and return to employment. However, family members also expressed ambivalence arising from stigma, misconceptions and concerns regarding methadone. These findings reinforce the need to examine methadone treatment as both a clinical and social intervention and indicate that treatment outcomes can be influenced by the attitudes and support of individuals surrounding the person receiving treatment.

Treatment Acceptance, Retention and Experiences of Methadone Treatment

The effectiveness of methadone treatment depends partly on whether individuals are willing and able to remain engaged with treatment. Treatment experiences can be influenced by accessibility, dosing requirements, relationships with treatment providers, stigma, individual beliefs about methadone and expectations regarding recovery. Qualitative research has demonstrated that restrictive treatment arrangements and stigma can negatively affect treatment experiences and retention. Carlisle et al. (2023), for example, found that people receiving opioid agonist treatment experienced structural and interpersonal challenges that affected their treatment journeys, while stigma represented an important barrier to living fulfilling lives during recovery. Such evidence suggests that programme effectiveness cannot be separated from the social and organisational conditions under which treatment is provided.

Patients may also experience considerable ambivalence regarding the duration of methadone treatment. Thakrar et al. (2023) found that some individuals regarded methadone as a temporary bridge towards an opioid-free life, while others considered discontinuing treatment because of perceived side effects, daily dosing requirements, concerns about treatment availability, or stigma from family members and peers. Importantly, a desire eventually to discontinue methadone does not necessarily indicate dissatisfaction with its immediate therapeutic benefits. Rather, individuals may simultaneously recognise methadone as beneficial while aspiring to become independent of medication. Patient education, individualised treatment planning, flexible service provision where clinically appropriate and stigma reduction may therefore contribute to treatment acceptance and sustained engagement.

Social Functioning and Social Reintegration in Opioid Recovery

Recovery from opioid dependence extends beyond reduced drug consumption and encompasses the reconstruction of meaningful social and economic roles. Employment, financial stability, family relationships, community participation and personal autonomy can therefore constitute important indicators of recovery. Malaysian research provides support for this broader interpretation. Baharom et al. (2012) found improvements in social relationships and overall quality of life following sustained methadone treatment, while Yahaya et al. (2026) identified restored functionality, family stability and return to employment among Malaysian MMT clients from the perspectives of their family members. These findings suggest that social functioning should be considered alongside conventional clinical outcomes when assessing the perceived effectiveness of methadone treatment.

Social reintegration is also closely related to stigma and community acceptance. People receiving methadone may continue to experience negative social attitudes even when treatment has enabled them to reduce illicit opioid use and regain stability. Carlisle et al. (2023) found that stigma operated across different levels of the treatment environment and could restrict individuals' ability to live fulfilling lives while receiving opioid agonist treatment. More recent Malaysian evidence similarly demonstrates a tension between families' recognition of methadone's effectiveness and persistent concerns or stigma surrounding the treatment (Yahaya et al., 2026). These findings are directly relevant to the present study, which examines effectiveness not only

through participants' experiences of opioid dependence but also through their ability to work, manage finances, rebuild relationships, participate in community life and restore everyday social functioning.

METHODOLOGY

Research Design

This study employed a qualitative research approach using a phenomenological design to obtain detailed accounts of participants' lived experiences of receiving methadone treatment. The approach was appropriate for exploring perceived effectiveness, treatment acceptance, and social functioning. The study did not use a comparison group or objective outcome measures to evaluate treatment efficacy, changes in clinical dependence, or causal effects of the programme.

Study Setting and Participants

The study was conducted at a single treatment site, Community Care House (CCH), Jalan Scotland, Penang, Malaysia. Participants were individuals with a history of opioid use who were receiving methadone treatment at CCH. The geographical scope is therefore the experiences of participants recruited at this site, rather than a district-wide sample of treatment services or residents.

Purposive sampling was employed to recruit participants who had direct experience of the phenomenon under investigation. The inclusion criteria specified that participants should be male, able to communicate in Bahasa Melayu, mentally capable of participating in the interview, and willing to openly share their views and experiences.

Eight participants were included in the final analysis. All patient were aged between 26 and 56 years. Their reported duration of methadone treatment ranged from approximately one to six years.

Participant Characteristics

Participant	Age (years)	Sex	Duration of Methadone Treatment
P1	53	Male	2 years
P2	50	Male	5 years
P3	28	Male	6 years
P4	54	Male	3 years
P5	49	Male	6 years
P6	37	Male	5 years
P7	26	Male	1 year
P8	56	Male	2 years

Participants had a mean age of approximately 44 years. Collectively, their treatment histories provided perspectives from individuals at different stages of engagement with methadone treatment.

Data Collection

Data were collected through interviews developed around the study objectives. Questions explored participants' experiences of receiving methadone treatment; perceived changes in illicit opioid craving and use and related harms; treatment acceptance, accessibility, affordability, and concerns about continued methadone use; and reported changes in employment, finances, family and community relationships, and everyday functioning. These accounts were treated as participants' perceptions rather than independently verified clinical or socioeconomic outcomes.

Permission was obtained from participants before interviews were recorded. Recording enabled the researcher to revisit participants' accounts and prepare transcripts for analysis. Interview data were supplemented by research notes and relevant documentary materials.

Data Analysis

The interview data were analysed using thematic analysis. The analytical process involved familiarisation with the data, generation of initial codes, identification of potential themes, review of the themes, definition and naming of themes, and reporting of the findings. Themes were developed from recurring patterns within participants' accounts and organised according to the principal objectives of the study.

Ethical Considerations

Participation was voluntary, and participants were informed about the purpose of the study before taking part. Informed consent was obtained, and participants were given the opportunity to decide whether they wished to participate. Confidentiality and protection of participants' identities were emphasised, and participants could withdraw from the interview if they no longer wished to continue.

FINDINGS

The thematic analysis identified four interconnected themes concerning participants' experiences of the Methadone Treatment Programme: (1) perceived changes in illicit opioid craving and use and everyday stability; (2) harm reduction and perceptions of infectious-disease risk; (3) treatment acceptance, accessibility, and concerns about long-term methadone use; and (4) perceived improvements in social functioning and reintegration. The themes overlapped across accounts of craving, employment, financial circumstances, relationships, and community participation. They describe the experiences of the eight participants and do not establish causal programme effects.

Perceived Changes in Illicit Opioid Craving and Use and Everyday Stability

All eight participants perceived the Methadone Treatment Programme as beneficial in reducing their dependence on illicit opioids. However, participants did not define effectiveness solely in terms of stopping opioid use. Instead, they described improvement through several interconnected indicators, including reduced craving, the ability to return to work, improved financial circumstances, and greater stability in everyday life. Participants 2, 4, 5, and 7 particularly emphasised employment. Participant 7 explained that methadone reduced his craving sufficiently for him to concentrate on work and resume a more normal daily routine. Similarly, Participant 5 explained that when experiencing strong craving he had previously been unable to work, whereas methadone enabled him to function more consistently. These findings are consistent with recent Malaysian evidence showing that methadone maintenance treatment may contribute to restored functionality and return to employment among people experiencing opioid dependence (Yahaya et al., 2026).

Reduction in opioid craving was particularly evident in the accounts of Participants 1, 7, and 8. Participant 8 stated that after entering treatment, he no longer sought the illicit opioid he had previously used. Participant 1, however, provided a more nuanced account. Although methadone reduced physical craving, he acknowledged that thoughts about drug use remained and that being around peers who continued to use drugs could encourage a return to previous behaviour. The original data therefore indicate that participants perceived methadone as facilitating control over opioid use rather than automatically eliminating all psychological and social triggers. This distinction is important because contemporary research similarly conceptualises methadone treatment as part of a longer recovery process shaped by both individual and social conditions, rather than as an isolated pharmacological solution (Carlisle et al., 2023).

Economic improvement formed another component of perceived effectiveness. Participant 3 specifically reported being able to save money that would previously have been spent on drugs, while Participant 6 associated treatment with broader improvements in living circumstances, including the ability of people receiving treatment to work, acquire personal assets, marry, and establish families. Thus, participants evaluated treatment through tangible improvements in their everyday lives. The findings suggest that the perceived effectiveness of methadone was closely connected to the restoration of stability and productive social roles rather than being confined to reduced drug consumption.

Harm Reduction and Perceived Reduction of Infectious-Disease Risks

Participants also discussed methadone treatment within the broader context of harm reduction. Six of the eight participants—Participants 1, 3, 4, 5, 6, and 7—believed that the programme contributed to reducing the risk of infectious diseases such as HIV and hepatitis. Participants 3 and 6 specifically connected this perceived benefit to reductions in injecting practices and needle sharing. This is an important distinction: the participants were not describing methadone itself as directly preventing infection, but rather describing how movement away from injecting opioid use could reduce behaviours associated with blood-borne disease transmission.

This interpretation is broadly consistent with the harm-reduction rationale underlying opioid agonist treatment, in which reduced reliance on injecting illicit opioids can reduce exposure to injection-related health risks. Recent Malaysian research likewise positions methadone treatment within the national harm-reduction response and identifies reduced illicit opioid use as one of its recognised benefits (Yahaya et al., 2026). The present findings therefore demonstrate that some participants understood the programme not only as a treatment for dependence but also as a means of reducing behaviours associated with wider health risks.

Nevertheless, perceptions were not uniform. Participant 8 stated that he was uncertain about whether methadone treatment could reduce infectious-disease transmission, while Participant 2 did not believe that the programme could control such diseases. These divergent responses indicate differences in participants' expressed understanding of the relationship between methadone treatment, injecting behaviour, and disease prevention. Rather than interpreting these responses as evidence that the programme did or did not clinically prevent infectious disease, the findings point to variation in participants' perceptions of health risks. This suggests a potential need for harm-reduction programmes to accompany pharmacological treatment with accessible education concerning HIV, hepatitis, injecting practices, and other health risks.

Treatment Acceptance, Accessibility, and Concerns About Long-Term Dependence

All eight participants expressed acceptance of the Methadone Treatment Programme, although their reasons differed considerably. Participants 3 and 8 associated acceptance with improved functioning and the ability to work, while Participants 1 and 7 described methadone as highly beneficial to their recovery. Accessibility and affordability were also prominent. Participants 2 and 4 emphasised that methadone was provided without charge, while Participant 5 contrasted treatment with the continuous financial burden of purchasing illicit drugs. For these participants, treatment acceptance therefore reflected not only its perceived therapeutic effect but also its practicality within everyday economic circumstances.

The importance of accessibility is consistent with contemporary research demonstrating that the organisation of methadone services can influence patients' willingness and ability to remain in treatment. Treatment requirements that interfere with employment, transportation, or other everyday responsibilities can create barriers even when patients recognise the benefits of methadone. Thakrar et al. (2023), for example, found that patients could perceive frequent dosing requirements as burdensome and potentially conflicting with employment and other responsibilities. Similarly, research on patients receiving methadone has shown that greater flexibility and opportunities to self-manage treatment can reduce time, risk, and stigma burdens (López-Castro et al., 2024).

An important counterpoint emerged from Participant 6, who valued the programme but did not want to remain dependent on methadone indefinitely. He explained:

> *"I appreciate the methadone programme, but I do not want to depend on it forever."*

This account demonstrates that treatment acceptance and a desire eventually to discontinue methadone are not necessarily contradictory. A participant may recognise substantial benefits while simultaneously viewing medication independence as a longer-term recovery goal. Similar ambivalence has been documented by Thakrar et al. (2023), who found that some patients viewed methadone as a bridge towards an opioid-free future and wished eventually to discontinue treatment despite recognising its stabilising role. The present study

therefore highlights the importance of recognising individual differences in how long-term methadone treatment is understood and experienced.

Restoration of Social Functioning and Social Reintegration

One of the strongest findings was the perceived improvement in participants' social functioning. All participants described some form of positive change in their ability to function within everyday social environments. Three closely related dimensions emerged: improved occupational functioning, stronger family and community relationships, and positive personal change. Participants 1, 2, 5, and 8 specifically described improved work functioning. Participant 1 explained that after receiving methadone he could continue working throughout the day, while Participant 8 associated treatment with consistent employment and the ability to purchase personal assets through his earnings.

These findings are particularly important because they indicate that participants conceptualised recovery through the restoration of productive roles. Recent Malaysian research provides strong support for this interpretation. Yahaya et al. (2026) identified "restored functionality and social reintegration" as a major theme in family members' accounts of methadone treatment, including return to employment and improvements in behaviour and family stability. A recent Malaysian evaluation of methadone replacement therapy also identified social functioning as significantly associated with treatment retention, further demonstrating the relevance of social conditions to continuity of care (Baharuddin et al., 2025).

Improved interpersonal relationships were reported by Participants 1, 2, 3, 4, 5, and 6. Participant 3 offered a particularly clear description of social reintegration:

"We feel that we can mix with society. Before, we wanted to run away from society. Now we have the confidence to go out and be part of the community."

Participant 6 similarly described maintaining close family relationships and indicated that family members had observed positive changes after he entered methadone treatment. These accounts suggest that recovery involved a transition from social withdrawal or marginalisation towards greater family and community participation. The importance of these relationships is reinforced by recent Malaysian evidence showing that family attitudes and support can play an important role in treatment adherence and recovery, even while stigma and misconceptions surrounding methadone remain present (Yahaya et al., 2026).

The final dimension concerned changes in participants' perceptions of themselves and their everyday security. Participant 7 reported feeling "better" and "safer" after receiving methadone and described reduced anxiety about obtaining money to purchase drugs. His account illustrates how treatment-related stability could extend into emotional and financial dimensions of everyday life. At the same time, recovery and social reintegration may continue to be constrained by stigma. Research among people receiving opioid agonist treatment has shown that stigma can operate through treatment systems, healthcare providers, families, peers, and wider society and can restrict opportunities for individuals to live fulfilling lives during recovery (Carlisle et al., 2023; Carl et al., 2023).

Taken together, the findings indicate that participants perceived the Methadone Treatment Programme as having effects extending beyond the management of opioid dependence. Treatment was associated with the ability to work, greater financial stability, reduced engagement in risky drug-use practices, improved relationships, greater community participation, and increased personal stability. These dimensions collectively suggest that, from the participants' perspectives, methadone treatment contributed to a broader process of social reintegration and restoration of everyday functioning. This interpretation is consistent with emerging Malaysian evidence that methadone treatment may support restored functionality and social reintegration alongside reductions in opioid craving and withdrawal (Yahaya et al., 2026).

DISCUSSION

Participants' Accounts of Stability and Reduced Reliance on Illicit Opioids

Participants perceived methadone treatment as helpful in managing illicit opioid craving and reliance on illicit opioids, alongside changes they associated with greater everyday stability. Their accounts described less drug-seeking behaviour, improved ability to work, financial savings, and improved living circumstances. These findings illuminate the meanings participants attached to treatment benefits. They do not establish abstinence, changes in clinical dependence, or the magnitude of changes in opioid consumption. Participants' perspectives can complement objective outcome evaluation by identifying valued experiences of stable routines and meaningful personal and social roles.

This interpretation is supported by recent Malaysian evidence. Yahaya et al. (2026) found that family members of individuals receiving Methadone Maintenance Therapy (MMT) observed reduced cravings and withdrawal symptoms alongside improvements in behaviour, employment, emotional regulation, and general functioning. Their study identified restored functionality and social reintegration as major indicators through which families recognised the effectiveness of methadone treatment. The similarities are particularly noteworthy because the present study captures the perspectives of people receiving treatment themselves, whereas Yahaya et al. (2026) examined family members. Together, these perspectives suggest that improvements associated with methadone treatment may be observable both by individuals undergoing treatment and by people within their immediate social environments.

The findings also demonstrate that pharmacological stabilisation alone may not fully explain participants' recovery experiences. One participant reported that although methadone reduced craving, thoughts about illicit drug use could remain, particularly when interacting with peers who continued to use drugs. This highlights the influence of the social environment on recovery. Carlisle et al. (2023) similarly found that opioid agonist treatment journeys are shaped by interconnected individual, interpersonal, service-level, and wider structural factors. Methadone should therefore be understood as an important component of recovery, but one that may be strengthened by psychosocial interventions, supportive relationships, relapse-prevention strategies, and environments that facilitate sustained behavioural change.

Harm Reduction Beyond the Reduction of Opioid Use

The findings further demonstrate the relevance of methadone treatment within a broader harm-reduction framework. Six participants believed that the programme contributed to reducing the risk of infectious diseases, with some specifically associating this benefit with reduced injecting and needle-sharing practices. The significance of this finding lies in the behavioural pathway described by participants. Methadone does not directly prevent HIV or hepatitis; rather, by reducing reliance on illicit opioids and potentially decreasing injecting practices, treatment can reduce exposure to behaviours through which blood-borne infections may be transmitted.

This finding is consistent with the broader rationale for MMT in Malaysia. Yahaya et al. (2026) situate Malaysian methadone treatment within the country's harm-reduction response and note its established role in reducing illicit opioid use and HIV transmission. The present study adds a participant-level perspective to this evidence by showing how individuals themselves understood the relationship between treatment and changes in risk behaviour.

The disagreement and uncertainty expressed by two participants indicate variation in how the relationship between methadone treatment and infectious-disease risk was understood. These interviews did not assess health literacy or infection status, so the responses cannot establish a knowledge deficit or confirm clinical prevention. They nevertheless suggest that services could provide opportunities to discuss HIV, hepatitis, injecting practices, and other health risks in accessible terms. Any such education should clarify that participants' beliefs about risk reduction are distinct from evidence of changes in infection incidence.

Treatment Acceptance Is Shaped by Accessibility and Everyday Practicalities

The high level of treatment acceptance among participants was associated with practical as well as therapeutic considerations. Participants valued methadone because it helped them work, reduced the financial burden associated with purchasing illicit drugs, and was readily available without direct medication costs within the programme. These findings suggest that accessibility and affordability can influence how individuals perceive treatment. From the participants' perspective, the value of methadone was closely connected to whether treatment made everyday life more manageable.

This is important because treatment retention can be influenced by the way methadone services are organised. Even when medication is clinically effective, requirements surrounding frequent attendance, transportation, dosing schedules, and treatment regulations may affect an individual's ability or willingness to remain engaged. Thakrar et al. (2023) found that some individuals receiving methadone considered daily dosing burdensome, while concerns about treatment accessibility and stigma also shaped decisions about whether to continue treatment. Treatment programmes should therefore consider not only whether methadone is available but also whether its delivery is compatible with employment, family responsibilities, transportation needs, and other aspects of participants' daily lives.

One particularly important finding was the ambivalence expressed by a participant who valued the programme but did not want to remain dependent on methadone indefinitely. This should not be interpreted simply as rejection of treatment. Thakrar et al. (2023) similarly found that some patients regarded methadone as a temporary bridge towards an opioid-free future, while others wanted to discontinue treatment because of concerns about long-term medication use, daily dosing, accessibility, or stigma. Importantly, discontinuation of methadone can increase the risk of relapse, overdose, and mortality; therefore, decisions regarding tapering or cessation require individualised clinical assessment rather than an assumption that successful recovery necessarily requires stopping methadone.

These findings support a patient-centred approach in which individuals are provided with accurate information about methadone, treatment duration, possible risks and benefits, and options for continuing or eventually tapering treatment where clinically appropriate. Treatment goals should therefore be negotiated with patients rather than imposed through a uniform expectation regarding how long methadone should be used.

Social Functioning and Reintegration as Important Recovery Outcomes

A central contribution of the present study is its demonstration that participants understood recovery through improvements in social functioning. Participants described being able to work more consistently, improve their financial circumstances, rebuild relationships with family members, interact more confidently with their communities, and experience greater personal stability. These findings indicate that the perceived benefits of methadone extended considerably beyond the pharmacological management of opioid dependence.

The importance of social reintegration is strongly supported by recent Malaysian evidence. Yahaya et al. (2026) identified restored functionality and social reintegration as a major theme among family members of MMT clients. Families reported improvements including return to employment, improved emotional regulation, greater family stability, and behavioural evidence of recovery. The present study complements these findings by demonstrating that people receiving methadone themselves similarly evaluated treatment through their ability to fulfil ordinary social roles.

Employment was particularly significant. Participants did not discuss work merely as a source of income; employment appeared to represent normality, independence, responsibility, and the ability to participate productively in society. Financial savings similarly represented more than an economic benefit. Money that had previously been directed towards obtaining illicit drugs could instead contribute to everyday needs and greater material stability. These changes indicate that employment and financial functioning may constitute important forms of recovery capital, enabling individuals to develop resources that support longer-term recovery.

Family and community relationships were equally important. Several participants reported improvements in their relationships with family members and greater confidence interacting with their communities. One participant described previously wanting to avoid society but subsequently becoming more confident about participating in community life. Such accounts indicate a movement from social withdrawal towards reintegration. This is especially significant within the Malaysian context, where family relationships can have a substantial influence on treatment and recovery. Yahaya et al. (2026) found that family attitudes were important to treatment adherence and recovery outcomes, although families could simultaneously recognise methadone's effectiveness and retain concerns or misconceptions about the treatment.

Stigma, Social Support, and the Role of Social Work

Although participants generally described improvements in social functioning, successful reintegration should not be understood as an individual responsibility alone. People receiving methadone may continue to experience stigma associated both with previous drug use and with methadone treatment itself. Carlisle et al. (2023) identified stigma as a systemic barrier affecting opioid agonist treatment journeys and concluded that it can restrict the ability of individuals receiving treatment to live fulfilling lives. Research focusing specifically on people receiving methadone has similarly found that stigma may arise within healthcare and substance-use treatment settings, demonstrating that negative attitudes can persist even within institutions intended to support recovery.

This issue is also evident in Malaysia. Yahaya et al. (2026) found that families could simultaneously recognise the effectiveness of methadone and remain ambivalent because of misconceptions, safety concerns, and negative social attitudes. Their findings support family-inclusive and stigma-reducing approaches within Malaysian harm-reduction programmes. Consequently, improving treatment outcomes requires attention not only to the individual receiving methadone but also to the social environment within which recovery occurs.

This is where social work can make a particularly important contribution. Social workers can complement pharmacological treatment by addressing psychosocial needs that medication alone cannot resolve. Their roles may include providing psychosocial support, facilitating family communication, connecting clients with employment and welfare resources, delivering health education, addressing stigma, advocating for equitable access to services, and supporting community reintegration. Social workers can also act as mediators between clients, families, healthcare providers, and community organisations, particularly where misconceptions surrounding methadone create barriers to treatment or reintegration.

The findings therefore support an integrated model in which methadone treatment is accompanied by psychosocial and community-based support. Such an approach is consistent with evidence that opioid agonist treatment journeys are influenced by individual, interpersonal, organisational, and structural factors rather than pharmacological treatment alone (Carlisle et al., 2023). For the Malaysian context, greater integration between healthcare providers, social workers, families, community organisations, and harm-reduction services could strengthen treatment continuity while supporting participants in rebuilding social roles and relationships.

Overall Interpretation and Contribution of the Study

Taken together, the findings suggest that the perceived effectiveness of methadone treatment among the eight men interviewed at CCH was multidimensional. Participants associated treatment with reduced illicit opioid craving and drug-seeking behaviour, and evaluated its helpfulness through their ability to work, save money, maintain routines, rebuild relationships, and participate in society. These accounts describe perceived benefits within one community treatment setting; they should not be interpreted as an evaluation of all methadone services in Northeast Penang.

The study contributes to the literature by providing a qualitative account from individuals receiving methadone treatment themselves. This is particularly relevant when considered alongside the recent Malaysian study by Yahaya et al. (2026), which examined the perspectives of family members and similarly identified restored functionality, employment, family stability, and social reintegration as important outcomes. The convergence between these findings strengthens the argument that methadone treatment outcomes in Malaysia should be understood through both clinical and social dimensions.

The findings should be interpreted as participants' perceptions rather than evidence of causal clinical effectiveness. No objective measures of opioid consumption, dependence severity, infectious-disease incidence, employment, or other clinical and socioeconomic indicators were reported. The contribution of the study lies in describing how individuals receiving treatment understood changes in their lives and the benefits and concerns they associated with methadone treatment.

LIMITATIONS

The sample comprised eight patient recruited purposively from one treatment site, with reported treatment durations of approximately one to six years. The findings may not reflect the experiences of women, other ethnic groups, people at other sites, or people who had discontinued treatment. Retrospective interview accounts may be affected by recall and social desirability, and the analysis cannot separate treatment-related changes from other influences. Acceptance among current participants does not establish programme retention rates or the experiences of those who left treatment. Transferability depends on the similarity of other service and participant contexts; statistical generalisation is not intended.

CONCLUSION

This qualitative study explored the perceived effectiveness and experiences of methadone treatment among patient receiving treatment at CCH, Jalan Scotland, Penang, Malaysia. Participants described benefits they associated with treatment, including reduced illicit opioid craving and reliance on illicit opioids, improved ability to work, financial savings, stronger family and community relationships, and greater personal stability. Some perceived reduced health risks through avoiding injecting practices and needle sharing, while others disagreed or were uncertain. Treatment acceptance reflected perceived helpfulness, affordability, and accessibility, alongside one participant's concern about long-term methadone use. These accounts indicate that participants valued treatment through everyday functioning and social reintegration as well as the management of craving.

The findings suggest a role for patient-centred services that combine methadone treatment with psychosocial, family, community, and social-work support. They do not establish that the programme causally reduced opioid dependence or infectious-disease transmission. Future research should include more diverse participants across multiple sites and use longitudinal or mixed-method designs to examine opioid use, treatment retention, social functioning, and quality of life. Qualitative work with people who discontinue treatment could also clarify barriers to continuation that were not captured in this sample.

Ethical Statement

This study was conducted in accordance with established ethical principles for research involving human participants. Participation was voluntary, and all participants were informed of the purpose of the study and their right to withdraw from the research at any time. Informed consent was obtained prior to data collection. Participants' privacy and confidentiality were maintained throughout the research process, and identifying information was not included in the analysis or reporting of the findings. Participant codes were used when presenting interview excerpts to preserve anonymity. All information collected was used solely for research purposes, and no personally identifiable information is disclosed in this article.

Conflict of Interest

The authors declare that there are no financial, professional, or personal conflicts of interest that could have influenced the research, authorship, or publication of this article.

Data Availability Statement

The qualitative data supporting the findings of this study, including interview transcripts and participant responses, are available from the corresponding author upon reasonable request. The data are not publicly available due to ethical considerations and to protect the privacy, anonymity, and confidentiality of the participants. No personally identifiable information will be made available.

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