

Factors Determining of Dropping Out from Treatment Among Methadone Clients: A Qualitative Study in Can Tho City, VietNam

Review Article

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Abstract

Methadone maintenance therapy has been a main pillar of harm reduction for people who injecting drug user in VietNam as well as in Can Tho. Dropout rate has indicated to be high in Can Tho city. Methadone maintenance has been offered since 2008 in VietNam and it implemented in Can Tho since 2010; however, its dropout rate is high. This study aim at exploring the factors related to drop out from treatment. Qualitative conducted to interview 17 methadone clients for both drop out clients and current on treatment clients; 4 health workers and 3 family members of clients. The barriers to stay longer on treatment which included: individual factors, community factors and institutional factors. This study suggests that increasing meaningful involvement of family's clients, strengthening counselling session on adherence for clients.

Keywords: Methadone Maintenance; Drop Out; Can Tho; VietNam, People Who Injecting Drug Users.

Introduction

Vietnam's HIV epidemic is concentrated among high risk behaviour population such as female sex worker (FSW), people who injecting drug (PWID) and Men who having sex with men (MSM). HIV prevalence among PWID was reported to be high as 10.3% compared to under 0.3% among general population [17]. In VietNam, the estimated number of PWID was 270,000 people in 2013. Of the 224,000 PLWHIV in 2013, 39% were PWID. MMT has been initiated since 2008 in Haiphong and Ho Chi Minh City [16]. By the year 2013, MMT programmes encompassed 88 clinics, covering 33 (out of 63) provinces, and serving 15,542 PWID [17].

Can Tho is one of the provinces that belong to the Mekong river delta area of VietNam. The province has 1.2 million inhabitants, of which 49,6% were male in 2013 [6]. This province is divided into 4 districts and 5 quarters.

Regarding to HIV epidemic, Can Tho is one of the cities in VietNam where the HIV prevalence has been ranked to be high in HIV epidemic. The cumulative people living with HIV was 5458, HIV prevalence among PWID was 24% in 2014. It is

estimated that, there were around 2000 PWID in Can Tho. MMT programmes started to be implemented in Can Tho City 5 years ago, in 2010. According to the data from the PAC of Can Tho in 2014, the cumulative dropout rate from treatment between 2010 and 2014 was 44% [4].

Methadone is a medication used to treat opiate dependence. It is often combined to psychological therapies that aim at supporting individuals, families, and communities in improving their health, reducing criminal activities, and minimising risky behaviours to HIV transmission [11].

Dropping out from treatment can lead to a relapse in drug injection and changes in behaviour. Furthermore, needle sharing practices among dropouts has also increased [1]. Reasons for dropping out from MMT treatment which are known in the literature are methadone dose, duration of treatment, gender difference, and history of opiod dependence [15].

A number of studies have been conducted among Methadone clients in Can Tho city [9]. However, none of those studies have explored the factors of dropping out from treatment among methadone clients. Therefore, there is an urgent need to better

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understand the reasons in which MMT dropouts occur, in order to inform the development of policies and programmes that can help to improve adherence to MMT in Can Tho.

Method

Sample

Convenience sampling was used to get 17 participants for study. The participants who are being 18 year of age and older, having civil abilities, and agreeing to participate to study.

- **Current MMT participants:** Were contacted by the administrators of the MMT clinics, as administrators have to contact their current clients regularly to remind them to come and take their drugs. After consenting to participate in the study, the participants were secondly contacted by the researcher in order to negotiate a time and a place for an interview.
- **Dropouts:** Invited to the research by peer educators group. This recruitment method has been chosen because evidence has shown that the relapse rates among dropouts is high, and therefore peer educators of harm reduction programme are key persons to reach them. Indeed, it has been estimated that 78% of PWID are reached by peer educators group through harm reduction programmes [4]. In a meeting with the peer educators group, the objectives, methods and selection criteria for the participants were introduced. Then, the research team asked the peer educators to invite the dropouts they already

- know to join the study. After reaching an agreement with the dropouts, the peer educators informed the research team about the time and location to conduct in-depth interviews.
- Health workers in MMT clinics have been informed through Can Tho Provincial HIV/AIDS Control and clinics. Doctors and Administrators were interviewed.
- Relatives of MMT clients were chosen based on the preferences of the clients regarding who could participate in the study. The research team then contacted the relatives that were mentioned to arrange a time and place to conduct in-depth interviews.

Data collection and data analysis

Data from key informants was collected with in-depth interviews. The interview guide divided in to three broad of reason for dropping out from treatment which is personal reason, community reason and institutional reason. The quote topic guide shows in the table.

The interviews were tape-recorded and transcribed verbatim in a MS Word document. MS Excel has been used to manage the information. The data has been coded based on specific objectives and themes, which have been identified in this study, mainly, the explanation of the difference between the current MMT clients and the dropouts. Data analysis was conducted through 3 stages: completion and management of data, analysis, and report writing. Both data collection and analysis has been conducted in Vietnamese, while the report has been written in English.

Table 1. The Theoretical topic guide.

Individual factors	
Knowledge related to HIV transmission and MMT	Can you tell me the way of HIV transmission? Do you think that you have risk to acquire HIV/AIDS? How and why? What are the roles of MMT? The results of dropping out from MT treatment?
Individual factors could lead to drop out from treatment	Which individual reason for dropping out from treatment? example - Financial issues - Occupation requirements - The self determinations - Fear of side effects of Methadone drug - Transportations - Self stigmatization
Community factors	Which reasons from community lead to drop out from treatment? Example - Family support - Peer influencing - Stigma and discrimination from community
Institutional factors	Which reason from institutional factors could lead to drop out from treatment Example The rules of health setting - The daily oral dose of methadone drug - The time working of clinic - The distance from home to the clinic - The attitude of health worker - The waiting time to get dose in the clinic
	Do you think which factors should be improved to help clients stay longer on treatment?

Results

The factors determining drop out from treatment

Individual factors

The occupation: The characteristic of job and the financial catastrophes could be influenced to stay longer on treatment. Especially, for the ones who had mobile jobs. Other reason was that, due to the purchase of heroin and life expense so some of them had to engage to be a debtor so they had to run away from the creditors.

“Because I have to move to rural area for my work, I could not access the methadone treatment. We are not allowed to bring methadone doses to home and the methadone drug is liquidity so it is difficult to bring it home, so I could not follow up the treatment” (Drop out client)

“Due to their debt, they had to run away from creditors because they could not have reimbursement. Hence, they had to leave out from treatment” (Health worker – Female)

The knowledge related to HIV and MMT: An inadequate knowledge about MMT and the risk of HIV transmission could lead to underestimating the role of MMT services and to keeping a risky behaviour for HIV transmission. Both dropouts and health workers shared the idea that misunderstandings and fear of side effects of methadone could contributed to drop out from treatment:

“Some of methadone clients thought that heroin was more satisfying than methadone. Other clients said that after 3 years of treatment, they could give up heroin and were successful in their methadone treatment, so that they dropped out without the permission of the doctors” (Health worker- Female).

Regarding their knowledge about HIV/AIDS, both dropouts and current clients knew about HIV transmission. Nevertheless, almost all of them believed that they were not at high-risk of being infected by HIV.

“I do not think I am at risk to acquire HIV because I did not share the needle and injections materials with any other drug users” (Current treatment client–Man)

Inadequate knowledge can be due to lack of information sources and unavailability of information channels related to HIV/AIDS and MMT. Common channels used by clients and their relatives were television, internet, health workers, and committee authorities. All participants shared a similar idea of the consequences of leaving the treatment against the health workers' decision: relapse in heroin usage, and appearance of health issues such as weight loss or insomnia.

Clients' self-determination: Self-determination seemed to be a motivation to stay longer on treatment. Indeed, visiting MMT clinics every day can affect the clients' patience. Also, giving up heroin is not easy and progress takes time. Moreover, according to the MMT guidelines, all clients have to start the treatment with a methadone dose of 20mg, so it is likely that the clients do not get satisfied at the dose-finding stage. The decision to give up heroin seemed to play a vital role regarding how long clients would keep on attending MMT:

“Due to a lack of determination for treatment and the fact that they thought they could not get high or satisfied with the methadone dosage, some of them gave up at the dose-finding phase, even if they attended the pre-treatment counselling and even if all the information related to MMT was provided to them” (Health worker- Female).

Besides that, depression in some clients who were HIV positive could have led to dropping out from treatment. Because HIV cannot be cured, some thought that they would die soon anyway and might as well enjoy their last days with heroin. They also thought that if they uptake both ARV and Methadone treatment, they will then get a “drug poisoning”

“The clients who have HIV positive, If they take methadone drug they will be die soon” (Dropout client – Man)

Unreadiness for treatment: Unreadiness for treatment could also be a factor influencing a drop out from treatment. In VietNam, the PWID, because of their use of drugs that are illegal in the country, will be under observation of the police or the community authority. If a PWID joined MMT, the observation by the police would be reduced. In other words, MMT can become a shield for the clients who want to avoid the observation. Under this protection, the MMT clients might actually not give up on their heroin injections. Some of them even got arrested by the police because of criminal activities.

“Some clients were suspected by the police or were under the management of the commune authorities because of illicit drug use. Hence, they attended MMT without wanting to get treated.” (Health worker - Female)

Reason for health-seeking behaviours: Both dropouts and current clients said that the main reason for utilising MMT was to change their lifestyle from heroin injection, which they called “abnormal life”, to “normal life”, which a good health for a healthy life. They and their family felt tired of the heroin-injection life style and the related financial catastrophes. Despite that, if the reason for treatment was legal pressure, then clients tended to leave treatment earlier.

“I want to give up on the behaviours related to heroin injection. Before attending MMT, I visited some heroin detoxification centres several times but without success. Being a heroin user, I had to steal goods from other people to get money for heroin. I do not want to have a life like this anymore.” (Current treatment client – Man)

Gender norm: Cultural norms are a pressure for MMT clients. This could be linked to their personal roles in their families, and gender-based stereotypes. During the in-depth interviews, male clients tended to say that they had to earn money for their family, while one of the female dropouts said that she could not stay longer on treatment because she had to take care of her family. The gender-based stereotypes underlying these statements are that males should go out and earn money for their families and that females should take care of their families. The decision to drop out seemed to be related to the individual responsibility they took:

“Sometimes I think that now that I have children and a husband to take care of, I do not want to follow up the treatment for a long time.” (Drop out client – Female, 32 years old)

For a male dropout, being a father made him not want to harm his family:

"Because of my family and my child, I had to give up the treatment because I did not want to be brought to my child. What would people think if they knew his father was an addict that has to take methadone every day?" (Drop out client - Man 38 years old)

Community factors influencing drop out from treatment among MMT clients

Peer influence: Peers can influence the MMT clients in two ways: by encouraging them, or by constraining them. Current MMT clients explained that they got to know MMT from their friends and that the latter also advised them to stay on treatment longer. Health workers also confirmed these facts. All participants said that familial support plays a vital role for clients to stay longer on treatment. The kind of familial supports that were mentioned were financial support, providing employment, support by helping with transportation, and mental support. Being disregarded by their family members could lead the MMT clients to depression, which can in turn lead to a drop out from MMT:

"I heard about MMT from some friends, who were PWID, they had attended the treatment before so they convinced me to join them" (Current treatment client – Man)

On the other hand, some clients' relatives affirmed that these peers sucked their son or their husband into relapsing in heroin injection, and that this was the reason why they wanted to keep them away from these peers:

Almost all of my husband's friends are PWID, so I tried to keep him away from them as much as I could. I know that some of them asked my husband to relapse into heroin injection, but he refused." (Relative's client – Female)

Stigma and discrimination: Stigmatisation and the fear of being stigmatised by the community is one of the obstacles to stay longer on treatment. PWID are usually familiar with stigma and discrimination because they suffered from it with the people who are living around them:

"I am a man; I have to work to earn money for my life and for my family. If they know that I am a MMT client, which means that I am a PWID, they will look down on me and my kids will be isolated from their friends because their father is PWID" (Drop out client – Man)

Still in the theme of stigma and discrimination, all participants said that almost all PWID had suffered from stigma and discrimination. Moreover, they also explained that their family could also become a victim of stigma and discrimination:

"People look down on me and my family. I could feel the stigma, even if they did not talk. It is from their attitude toward me" (Relative's client-female)

Family support: Pressure from the family influenced the clients' decision to go on treatment. A client's relative said that the pressure from the family helps the clients understand what is good for them. Therefore, under the pressure from the family, especially under the one of being a "good father" or a "good son", clients stayed longer on treatment.

From the clients' side, the pressure from family can lead to unwillingness to get treated. They would just come and take the drug under the pressure from their family, without really wanting to stay longer on treatment:

"At the beginning, my parents pushed me to attend the treatment and they also forced me to take methadone. But I was not willing to get treated, I thought that methadone and heroin were the same" (Drop out client – Man).

Inter-sectoral efforts at the community level are seen as a way to reduce the dropout rates from treatment and thereby increase the retention rate on treatment among MMT clients:

"We do need inter-sectoral efforts to mobilise the PWID to attend to treatment and stay longer on it. The police should force the PWID to attend the treatment. Besides that, we do need to have some career policy that helps clients have a stable life and a permanent job" (Health worker - Female)

The Institution factors influencing drop out from treatment.

Daily methadone dose: The daily dosage can influence the drop out from treatment among MMT clients. According to the guidelines, the clients have to take a dose of methadone every day under the health workers' observation. Almost all participants said that the dosage of daily oral methadone influenced their decision to drop out. Indeed, attending the MMT implied that, during their treatment time, the clients could not travel outside of the city and felt like their independence and freedom were restricted. Also, at the finding-dose phase of the treatment, the methadone doses were also not strong enough to stop their craving for heroin.

Nevertheless, all the participants shared the view that the amount of methadone they were given at each dose did not affect their decision to drop out or to adhere to the treatment:

"Methadone dose did not affect to retention on treatment or drop out from treatment, it was based on the self-determination, whether they want to use heroin or not. For me, my methadone dose was 140mg per day but I was still using heroin." (Drop out client – Man)

Time open of clinic: Besides that, an inappropriate working time could also lead to a drop out from treatment. The opening hours of health facilities coincided with the working time of the clients that were employed. Those could therefore not leave their working place every day during their shift to attend their treatment at the MMT clinic:

"Due to the overlapping between my working shifts in my company and the time of methadone dose uptake, I could not stay longer on treatment even though I wanted to attend it. I am telling you that if the clinic would have been open during non-working time, I would not have given up my treatment." (Drop out client – Male)

In order to reduce the drop out related to inappropriate working time, the MMT clients suggested that the clinic be open outside of regular working time (7AM to 5PM) to help its client to access their treatment. A health worker added that the procedure to deliver methadone should be simplified and be made more flexible:

"The opening time of methadone clinics was inappropriate, my working time starts at 7AM and the time of my appointment for methadone was also at 7AM. So I could not continue working if I was on treatment." (Drop out client- Male)

Long waiting time for obligation on treatment: The people who register for MMT must wait before getting the treatment. A long waiting time before treatment could also influence the decision to drop out among MMT clients. From the data collected from the clients' records, the mean waiting time for treatment was 53 days. After registration, some individuals dropped out because the waiting time was too long.

However, the waiting time has been reduced since, with the newest treatment procedure:

"The current treatment procedure is a new one, and the procedure has been simplified. In the past, clients had to wait for the confirmation from the commune before being allowed to attend the treatment. Now, with the application of the new policy, clients wait for less than 10 days before initiation of treatment" (Health worker- Female)

The attitude of health worker: Negative attitude was considered as a kind of stigma. Because they were addicted to heroin, MMT clients suffered from negative attitudes, not only in their community, but also from health settings.

The attitude that the clients and the health workers have toward each other was indeed mentioned as a factor that could lead to a drop out from treatment. The clients felt they were looked down on by the health workers:

"Because of the discrimination due to being a PWID, I decided to attend the treatment. However, when I was on treatment, the health workers looked at me like if I was a robber or an uneducated person. I have self-esteem and I am educated, I did not break the law, so why do they have this attitude toward me?" (Drop out client – Man)

Long distance from home to clinic: Health workers and current MMT clients shared similar views about the distance between home and MMT clinic being a barrier to adherence to treatment. In O Mon clinic, clients come from other district to get their dose. The long distance and the lack of means of transportation to go to the clinic every day could lead to non-adherence and drop out from the treatment. One of the clients said that

"The lack of vehicle can lead to dropping out because the clients don't have enough money to access to clinics and almost all the clients are so poor they don't have their own motorbike to go to the clinics" (Current on treatment – Female, 27 years old)

Unclear treatment progress: Long treatment duration seemed to be confusing for clients. Having to spend more than a year to give up on drug dependence was considered to be too long for some people. For example, when being sick, people go to the doctor and know how much time their recovery will take. This is different with MMT.

From the perspective of a client's relative, unclear treatment procedure that could vary between different clients can make the clients depressed. Consequently, they could not stand the idea of staying in the treatment any longer:

"My daughter has been attending the treatment for 4 years, but I don't know when she will finish her treatment. The doctors must inform the clients about the treatment procedure. For instance: a creative treatment procedure for each client with which she will be done after 4 or 5 years, with a clear process for dose reduction. I saw my daughter. She had to take methadone doses of 20 mg per day for a long time, why have the doctors not given her the reducing dose? These things made us tired." (Relatives' client - Female)

Discussion

Individual factors

Adherence during treatment: According to the findings, decreased adherence among dropouts can be due to their self-assessment. After a long time of treatment, clients may think that they can give up heroin injection and that their treatment was successful. In consequence, adherence can be reduced. This idea was mentioned by health workers and current clients.

The study conducted in London to explore the pattern of non-adherence shares similar results: a small majority of the current clients were "adherent" to the treatment (58%), 24% of them were "partially adherent" and 18% of them were of "poor adherence" [8]. In the study of Haskew, the level of adherence has been categorised into three scenarios such as "poor adherence" means that clients had consumed 1-2 methadone dose per month, "partial adherence" was the group of clients who consumed 3- 28 dose of methadone per month and "adherence" mean that.

Community factors: Almost all participants said that support from their family and their relatives could be a factor influencing drop out from treatment. Family could be a motivation for retention on treatment.

Family support implies both mental and financial support. This goes in line with the results of the cross-sectional study among 590 methadone clients that explored the relation between family support and the outcome of methadone program. The clients who received the support from family were less likely to keep using illicit drugs than those who were not supported by their family ($P < 0.01$) [10]. Currently, the involvement of family during the treatment is voluntary. Consequently, it might not be well coordinated with the clinics in their efforts to help clients stay longer on treatment and have a successful treatment.

The personal perspectives shared during the interviews of this study revealed that the influence from the peers could be either negative or positive for the retention on treatment. According to the results of the study that took place in China among PWID who attended methadone treatment, the rates of retention to treatment were lower among the clients who had PWIDs as friends, compared to the clients who did not have this kind of friend ($P < 0.005$) [3]. The utilisation of heroin rates were also lower among those who had family support, compared to those who did not have support from their family (OR 0.97, $P < 0.01$) [10].

Institutional factors

Daily oral dose: Daily liquid dose of methadone taken under

the observation of a health worker is one of the requirements for running a methadone clinic. However, from the literature review, we learnt that Stark identified the dosage of methadone as an institutional factor influencing the retention on treatment. Here, receiving methadone in daily oral doses seemed to be a barrier to retention on treatment.

Consuming methadone drug at the clinics every day could lead to reduce freedom of clients so that it could be a constraint for a longer treatment duration. Participants suggested ideas such as receiving methadone at home, or being allowed to take their dose home.

A retrospective cohort study has been conducted in Italy. In this study, researchers compared two groups: one that had daily doses in the clinic, and another that was taking their dose at home and went to the clinic only once a week for a health check-up. Here, the results were different: the clients taking their dose from home had significantly higher rates of leaving the treatment for detoxification (23.2%), compared to the group who took daily doses of methadone in the clinic (3.6%) [13].

Taking doses at home can therefore be an obstacle to treatment. Nevertheless, this can still be a good way to help clients organise their daily life and avoid daily attendance in the methadone clinics. Daily visit to methadone clinic could be a factor influencing retention of clients. Findings also showed that clients tended to stay longer on treatment when receiving high methadone doses ($\geq 60\text{mg}$) compared to those who got low doses ($\leq 40\text{mg}$) [13].

When looking at the association between the dose of methadone and heroin consumption, a higher dose of methadone could actually be a predictor of heroin usage during the treatment. Indeed, Luu Hoang Viet had shown that the prevalence of heroin usage among the group of clients who consumed a methadone dose $\geq 80\text{mg}$ was 3.66 times higher than the group who received a methadone dose $\leq 80\text{mg}$ [9].

The research conducted among Malaysian methadone clients in 2010 also found that the daily dose of methadone could contribute to the retention of the clients. Here as well, the retention prediction of clients who got the dose of more than 80mg was higher than those who got daily dose less than 80mg. The required dose to retention on treatment is 40mg/day. Nevertheless, and in line with the above mentioned studies, Mohamad recommended that a dose of 80mg was the most probable to lead to a successful treatment [12].

Distance from home to the clinic: The distance from home to clinic seemed to be barriers to access the services and it can also influence the decision to drop out among clients. It happened in O Mon clinic, where more clients came from other districts to attend the treatment.

A study conducted by Greenfield al. with 1753 clients attending methadone treatment in an urban area found that the clients who travelled less than 1 mile to reach the clinic were more likely to stay longer on treatment than those who had to travel for more than 1 mile. The retention rates among mobile methadone facilities were higher than those in fixed methadone facilities. Indeed, with a mobile facility, both time and cost of transportation is reduced for the clients, and it therefore leads to a greater service

accessibility [7].

However, the distance from home to clinics should be put into the context of whether public transportation is available or not. If the distance is far but transportation is available and the travel fee is reasonable, the long distance could not be a barrier, neither for accessing the services, nor for retention on treatment. In the context of this study, public transportation was not available, which could have been a constraint to stay longer on treatment.

Treatment progress: Unclear treatment progress for individual clients could lead to early leaving of treatment. This notion appeared during in-depth interviews. Clients were tired with the time their treatment took because it was time-consuming and they did not have any information about their progress. They needed to know when they would finish their treatment and wanted to see the treatment plans the doctors prepared for them.

Perterson et al., had conducted a research among clients who dropped out in Batimore - Maryland with the purpose to explore the reason why PWID were out of methadone treatment. The barriers included long waiting list, lack of health insurance, fear of side effects of methadone drug, and various requirements in the registration procedure [14]. Compared to the findings from our research, there was the concordant finding: unclear treatment progress could lead to a drop out. Even though quantitative part only focused on clients who already dropped out, similar barriers related to the treatment progress were found to be leading to drop out, both during treatment and at a pre-treatment time. Ball et al. conducted their study among 24 clients who had dropped out. The researchers developed a questionnaire in which different reasons to drop out from treatment were arranged into categories. Their results shared similarities with our study: transportation fees, the relationship between the clients and the health workers, their family relationships, and their individual perspective toward the programme were factors influencing their decision to drop out for their treatment. However, in their study, Ball et al. also found that fee for services in MMT clinics and stigma and discrimination were also predictors for dropping out of treatment, which was the case in our study. This difference is that in the context of VietNam, MMT is offered for free to all clients. Therefore, fee for services was not a predictor of drop out. As to discrimination and stigma, they seem as reasons for leaving the treatment, even though these phenomena have been experienced by some of the participants of our study [2].

Issues in the clients' health-seeking behaviour and finances could also be factors affecting their decision to drop out. In the cohort study conducted in Haiphong and Ho Chi Minh City, reasons to drop out among 43% of the methadone clients was arrest (FHI), which was a higher percentage than the figures that resulted from our research (36%) [5].

Limitations and Strengths of the Study

The fact that convenience samples were used introduces a selection bias. Also, dropouts who have been arrested could not be reached by this study.

This study fail to explore other factors related to dropouts that are not mentioned in the topic guide, such as cultural factors and

gender issues.

Regarding to the convenience sampling, other criteria for purposive sampling are potentially relevant to gaining wide range of insight on the reasons behind dropping out, or staying-on, on treatment, for example: one could distinguish between the Rich/Poor family PWIDs, Young/Old PWIDs, Male/Female PWIDs, HIV status etc. Each of these criteria could form the basis for purposeful sampling – but given the constraints of time and resources, I have limited the scope of my enquiry.

This study met its objectives the reasons to drop out from MMT were explored. The sample size of the study was adequate and the participants were assured as research proposal. Criteria in terms of gender and number of participants were met.

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