

Transition to Methadone Take Away Dosing and Perceived Benefits at A High-Capacity Temeke Medically Assisted Therapy Clinic in Dar Es Salaam, Tanzania

Fridah Tobias Mtui, Francis Lukuwi Benedict, Christina Vitalis Mramba, Rajabu Kichawe, Joseph Gasper Kimaro, Gread Gumbo

Department of Psychiatry, Temeke Regional referral hospital, Box 45232, Dar es salaam, Tanzania.

DOI: <https://doi.org/10.51244/IJRSI.2025.120600147>

Received: 13 June 2025; Accepted: 21 June 2025; Published: 17 July 2025

ABSTRACT

Aim: Methadone is currently the only opioid agonist therapy provided in Tanzania and this is almost exclusively dispensed daily. This highlight Take away dose (TAD) as one of the ways of informing flexible and more person-centred model of care for methadone treatment in Tanzania.

Methods: Routine secondary clinical data from Temeke Methadone clinic has been utilized. Temeke MAT clinic is located within Temeke Regional referral Hospital in the Dar es Salaam, Tanzania, it has more than 3500 registered clients and the active number of beneficiaries being about 960, who are being daily dispensed with methadone medication. We have used data from the Register books, daily attendance registers and TAD data from the registers and pharmacy dispensing register.

Results: By the end of 2024 there was a total of 143 clients in TAD of whom 124 were active clients in routine TAD and 7 were on special TAD. There were 19 TAD cancellation due to various reasons majority being Methadone diversion and repeated failure to adhere to TAD policy. The prevalence of MAT clients on TAD form total active clients is 124/1020 (12%).

Conclusions: Despite TAD being introduced at Temeke MAT clinic to increase efficacy in providing quality services, the number of clients joining TAD is still low and this may be due to high threshold needed to be enrolled in TAD. TAD is important aspects in MAT service provision by ensuring those beneficiaries who in one way or another are unable to attend to the clinic daily are getting the services. It is a high time we review the eligibility criteria on TAD protocol to increase the numbers of beneficiaries so that we can improve retention and adherence at our clinic and contribute to 2030 goals of eliminating HIV and viral hepatitis.

Keywords; Medically assisted therapy, People who use drugs, Viral hepatitis, Take away dose.

INTRODUCTION

Take away dose (TAD) as an intervention aims to modify management of People who Use Drugs (PWUD) by reducing need of daily attendance, crowded clinics, long waiting lines and potential for disease transmission while improving retention and adherence to Medically assisted Therapy (MAT).

The benefits brought by introducing TAD services includes increased retention among clients with special needs like being medically unfit to attend clinic daily, living far and not financially stable to afford travel expense and having occupational activities limiting daily clinic visit. Also, it has minimized clinic visits cutting down costs and provided more time to the family and engage in productive activities to stable eligible clients on methadone. TAD has helped to decongest a number of clients at clinic which has significant impact on shortage of staff and spreading of communicable diseases like Tuberculosis and COVID 19. [1], [2]

In implementation of TAD services, protocols, SOP and guideline have been developed and used to ensure smooth delivery of the services. However, barriers to access TAD services include failing to meet eligibility

criteria which have been listed in the guidelines and Standard Operating Procedures (SOP) by majority of the clients who requires TAD. However, some of clients drop out of TAD services mostly due to relapses, use of other substances, missed appointment resulting into miss doses, treatment supporter stopping supporting due to travelling or no longer will to support the client, suspected methadone diversion, poor documentation and handling of Methadone given.

During Covid-19 and post Covid-19 era studies advocate for adjustment of TAD eligibility criteria so as to include most of the clients who may benefit from TAD services and hence increase utilization, adherence and satisfaction to MAT services while reduce risk of overdose.[1], [3], [4], [5], [6], [7]

The aim of this paper is to identifying prevalence of clients on TAD, highlight TAD program achievement and barriers as well as propose the way forward in ensuring the practicability of it according to our setup MAT clinic at Temeke Regional Referral Hospital (TRRH).

METHODS

Study site was MAT clinic which is located at TRRH in the Dar es Salaam region, Tanzania.

Routine clinical data from Temeke MAT clinic was used. No individual client was interviewed; all data were obtained from the clinic documentation system while all personal identification information were removed for privacy issues.

We have used data from the Register books, daily attendance registers and TAD data from the registers and pharmacy dispensing register. The quantitative data analysis was done aiming at identifying prevalence of clients on TAD, number of drop-out from TAD and the reasons for TAD dropout. Furthermore, policies, guidelines and SOP on TAD provision were reviewed. The data was analysed by using excel sheet and the major findings were identified. The permission to utilise data was given by the hospital administration.

RESULTS

By the end of 2024, Temeke MAT clinic has more than 3500 registered clients and the active number of clients being about 960, who are being daily dispensed with methadone. There was a total of 143 clients enrolled in TAD of whom 124 were active clients in routine TAD and among those 7 were on special TAD. There were 19 clients dropped out of TAD due to various reasons majority being Methadone diversion and repeated failure to adhere to TAD policy. The prevalence of MAT clients on TAD form total active clients is 124/1020 (12%) The doses for those on TAD were ranging from 20mg to 320mg.

The TAD program at Temeke RRH was targeting to enroll 300 clients but since the initiation the clinic has been able to enroll 143 clients only despite several efforts to recruit more clients. The perceived problem to reach the target is criteria required to for a client to meet during enrollment in TAD services. In our MAT clinic TAD program require the client to fulfil several criteria include being active client for more than 6 months since enrollment to MAT clinic, to test negative for substances like (alcohol, cannabis, heroin and benzodiazepines) for six months, to be in maintaining methadone dose, stable housing, treatment supporter as well as good behavior at the clinic for more than six months. Given the nature of PWUD at our MAT clinic, a large number of those wish to be enrolled in TAD usually are unable to fulfil all the criteria hence unable to be enrolled.

There are also several procedures used for follow up to ensure the safety of methadone and avoid misuses of methadone. Failing to meet standards during monitoring through routine drug screening test, documentation of treatment chart, condition status of bottles and storage kit have resulted into forfeiting their TAD services to some of the clients.

Common cause of discontinuation of TAD services to clients in our MAT clinic were failure to turn up on their appointment date resulting to miss doses, adherence to recall policy and methadone diversion as per table 1 below.

Table 1; Cause of TAD discontinuation by November 2024

Clients Number	Causes of TAD discontinuation
5	Suspected Methadone diversion
2	Failure to adhere to recall policy
12	Failure to turn up at appointment date resulting into miss dose, Coming late to the clinic

DISCUSSION

The prevalence of MAT clients on TAD is 12%, this number indicates that TAD prevalence among people using drugs in Tanzania is much lower compared to the other clinics in other countries such as USA where the prevalence of TAD was between 56% to 82%. [1] This has been mainly due to failure to meet and maintain required criteria for TAD service provision to our clients.

Despite having low number of clients on TAD in our clinic, many clients wish to join TAD services, while the ones in TAD try their best not to drop-out TAD only 15% discontinued TAD services but continued with daily methadone dose. Some studies revealed that most of the patients are not happy with the limited access of the TAD and would prefer if the TAD will be more easily available and some even provided the reason of quitting MAT services is motivated by being unable to join TAD. [8] Some of the studies showed some of the clients who needed TAD were even willing to spend their own funds in order to continue getting TAD. [2]

TAD has several benefits to our MAT clients like accommodating clients with special needs (special TAD), close follow up of the clients, reducing travel cost for clients living far from the clinic, providing more time for clients to participate into income producing activities and has been a way to reconnecting clients to their close ones through need of treatment supporter and provide more time to get involved in family issues. Other studies also support this fact, study done in Australia the benefits reported by participants included being convenience, less travel and lower costs, protection of confidentiality and less restriction on employment as well as less tangible issues related to feelings of normality and flexibility in daily life patterns. Feeling trusted as a MAT client was also an important result of accessing TAD. [5] In the US the patients who were on TAD reported increased autonomy and flexibility in their treatment. [6]

The staff in several clinic reports TAD being important in reducing the costs and burden in the clinics. The number of clients attending daily clinic reduces when more people are enrolled in TAD and the clinics supplies such as water, cups and syringes used daily also reduce. This produces harmonious environment during service provision. A study done by Walley et al indicated that clients in TAD are less frequent users of the hospital services. [9] This cannot be well defended to our set- up since prevalence of client on TAD is still low compared to other clinics where other studies were done.

The studies shows that lowering requirements for TAD enrolment should be done but with care to minimize catastrophic consequences which may occur if methadone is misused. [3], [8] Several strategies have been put together to address TAD challenges at Temeke MAT clinic. The strategies developed at the clinic to increase TAD enrolment includes, six months period in MAT has been removed so long as client in stable dose and not found to use any other drug concurrently can be enrolled in TAD. Early involvement of family during MAT services so as to have reliable treatment supporter when interest of joining TAD arises later on in treatment however, we encourage clients on TAD to have more than one treatment supporter.

Psychosocial support including weekly appointment with nurse counsellor or social worker is carried out to ensure the beneficiaries are well adhering to TAD protocols and all the psychosocial issues are addressed and the client is comfortable in MAT services. Also, we plan to have quarterly meeting with TAD clients, families and their treatment supporters so as to ensure we address all the challenges in TAD provision.

The beneficiaries which are one way or another are unable to adhere to TAD guidelines may benefit from other medication options such as long-acting depot buprenorphine. Currently our clinic with assistance from several partners is conducting trial research on providing long-acting buprenorphine to MAT clients. This will ensure adherence to MAT treatment in adding more efforts in reaching the goal of eliminating viral hepatitis by 2030.

Limitations of our study include, low number of study participants which reduce power of generalizability of the findings. Furthermore, our study lacks qualitative findings which could be useful in getting perceived benefits and challenges of TAD from the participants. This calls for studies with qualitative interview and large number of participants in future studies on TAD.

CONCLUSION

TAD is an important aspect in MAT service provision by ensuring MAT clients who are unable to attend to the clinic daily are getting the services. It is a high time we review the eligibility criteria on TAD protocol to increase the numbers of beneficiaries in TAD as well as providing essential support needed to client of TAD to successful maintain in service till graduating out of management. Furthermore, finding other alternative treatments modules such as long-acting depot buprenorphine (LADB) will give different options to MAT clients which improve retention and adherence at our clinic resulting into reducing the burden of opioid use disorder.

Acknowledgements

Authors would like to thank the members of Department of psychiatry at Temeke regional Referral Hospital for their contribution during formulation of this article

Competing interests

Authors declares that they have no financial or personal relationships that may have inappropriately influenced them to write this information

Ethical consideration

This article followed all ethical standards without direct contacts with human or animal subjects

Author's contribution

All authors contributed to the formulation, editing and reviewing of this article

Funding

No funding was appropriated for this article from any institution

Disclaimer

The views expressed in this article are those of the authors and do not necessarily reflect official policy of the institution of which authors are affiliated with.

REFERENCE

1. M. C. Figgatt, Z. Salazar, E. Day, L. Vincent, and N. Dasgupta, "Take-home dosing experiences among persons receiving methadone maintenance treatment during COVID-19," *J Subst Abuse Treat*, vol. 123, Apr. 2021, doi: 10.1016/j.jsat.2021.108276.
2. E. Morse, G. Christianson, M. Olivadoti, and J. Timberlake, "Patient Challenges in Utilization of Methadone to Treat Opioid Use Disorder and Perspectives on a Solution for Improved Security and Convenience in Take-home Dosing," *Innov Clin Neurosci*, Jan. 2024.

3. S. Naher, S. Pervez, F. Ahmed, O. Elijah, Md. T. Mahmud, and K. Saif-Ur-Rahman, “Effectiveness of take-home methadone treatment among patients with opioid use disorders during COVID-19: A systematic review,” *Health Sciences Review*, vol. 12, p. 100195, Sep. 2024, doi: 10.1016/j.hsr.2024.100195.
4. D. Frank, “A chance to do it better: Methadone maintenance treatment in the age of Covid-19,” *J Subst Abuse Treat*, vol. 123, Apr. 2021, doi: 10.1016/j.jsat.2020.108246.
5. C. Treloar, S. Fraser, and K. Valentine, “Valuing methadone takeaway doses: The contribution of service-user perspectives to policy and practice,” *Drugs: Education, Prevention and Policy*, vol. 14, no. 1, pp. 61–74, Feb. 2007, doi: 10.1080/09687630600997527.
6. L. W. Suen, S. Castellanos, N. Joshi, S. Satterwhite, and K. R. Knight, “‘The idea is to help people achieve greater success and liberty’: A qualitative study of expanded methadone take-home access in opioid use disorder treatment,” *Subst Abus*, vol. 43, no. 1, pp. 1143–1150, 2022, doi: 10.1080/08897077.2022.2060438.
7. X. Tang et al., “Benefits and challenges experienced by participants on long-term methadone maintenance treatment in China: a qualitative study,” *BMC Med*, vol. 22, no. 1, Dec. 2024, doi: 10.1186/s12916-023-03203-z.
8. D. Frank, P. Mateu-Gelabert, D. C. Perlman, S. M. Walters, L. Curran, and H. Guarino, “‘It’s like ‘liquid handcuffs’: The effects of take-home dosing policies on Methadone Maintenance Treatment (MMT) patients’ lives,” *Harm Reduct J*, vol. 18, no. 1, Dec. 2021, doi: 10.1186/s12954-021-00535-y.
9. A. Y. Walley et al., “Methadone dose, take home status, and hospital admission among methadone maintenance patients,” *J Addict Med*, vol. 6, no. 3, pp. 186–190, Sep. 2012, doi: 10.1097/ADM.0b013e3182584772.