

Quality of life of patients treated with opium tincture or methadone: A randomized controlled trial.

Jane J. Kim, Mohammadali Nikoo, Nooshin Nikoo, Sanam Javidanbardan, Alireza Kazemi, Fiona Choi, Ali Gholami, Neda Y. Lafooraki, Marc Vogel, Pouya Rezazadeh-Azar, Maximilian Meyer, Maurice Cabanis, Kerry Jang, Shahin Aknondzadeh, Michael Krausz

Introduction

- Quality of life (QoL) is a crucial patient-centred treatment outcome for individuals with opioid use disorder. ¹
- Opium tincture (OT), a hydroalcoholic preparation of opium containing morphine as the active ingredient, is used in certain regions for opioid agonist treatment (OAT). ²
- OAT can enhance QoL among patients with opioid use disorder. ³

Aims

- To compare the QoL of participants with opioid use disorder receiving OAT using either OT or methadone in a randomized clinical trial
- To identify the factors associated with their QoL during treatment with either OT or methadone.

Methods

- Phase III multicentre stratified parallel-group, non-inferiority randomized clinical trial conducted in Iran, comparing OT and methadone over 85-day follow-up period.
- QoL was assessed across 4 domains of physical health, psychological health, social relationships, and environment health.
- Generalized Estimating Equations (GEE) were employed for univariate and multivariate analysis.

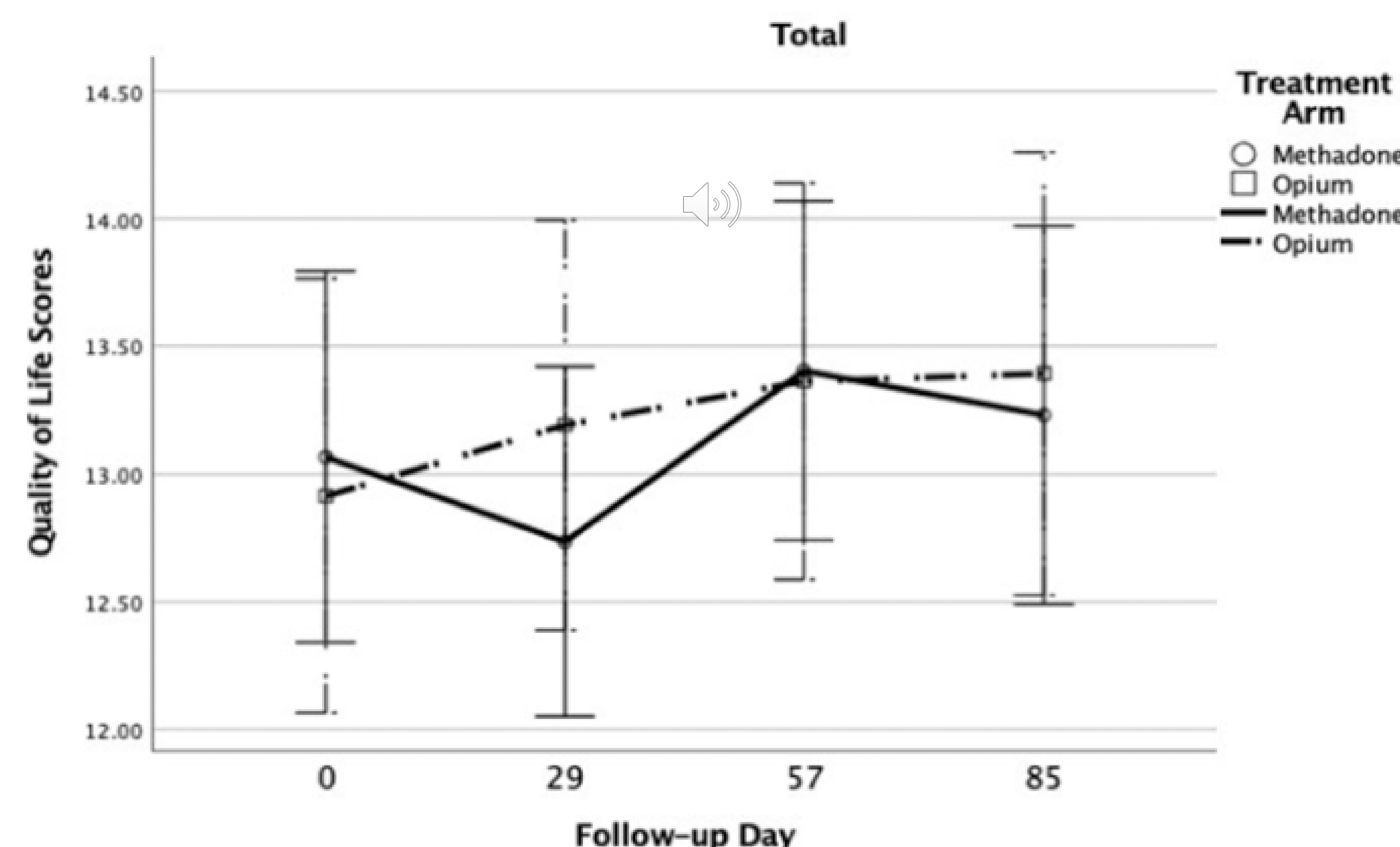
Acknowledgment

Canadian Institutes of Health Research, Grant/Award Number: 157934; Aja University of Medical Sciences, Grant/Award Number: 2/12/95; Iran National Science Foundation, Grant/Award Number: 93045481; Tehran University of Medical Sciences and Health Services, Grant/Award Number: 28099

Results

- 83 participants: 35 (42.2%) in OT arm and 48 (57.8%) in methadone arm
- Mean age = 38.2 (SD 9.1), 88% male, 73% married, and 63% with secondary school or higher education
- Increase in total QoL score from baseline to day 85 in both arms. Non-significant trend for time in follow-up assessments ($p = 0.083$).
- No significant differences between OT and methadone effects on QoL over time.

Changes in total WHO Quality of Life-BREF (WHOQOL-BREF) scores between baseline and 85 days follow-up, compared between participants in opium tincture arm and methadone arm.



- Lower QoL associated with psychological distress across all scores.
- Being married associated with improved QoL across most domains, except physical health.
- Male gender significantly associated with higher QoL in social relationships domain.

Discussion and Conclusion

- OT shows promise as an OAT medication, comparable to methadone, in improving patients' QoL.
- Integration of psychosocial interventions alongside pharmacological care may sustain QoL improvements over time.

Need for further research

- Exploration of longitudinal QoL trajectories during OAT in various sociocultural settings and their correlation with retention in treatment and use of unregulated substances.
- Examination of psychosocial interventions' impact on sustaining QoL improvements in OAT.

Reference / Bibliography

1. Bray, J. W., Aden, B., Eggman, A. A., Hellerstein, L., Wittenberg, E., Nosyk, B., Stribling, J. C., & Schackman, B. R. (2017). Quality of life as an outcome of opioid use disorder treatment: A systematic review. *Journal of Substance Abuse Treatment*, 76, 88–93. <https://doi.org/10.1016/j.jsat.2017.01.019>
2. Nikoo, M., Nikoo, N., Anbardon, S. J., Amiri, A., Vogel, M., Choi, F., Sepehry, A. A., Bagheri Valoojerdi, A. H., Jang, K., Schütz, C., Akhondzadeh, S., & Krausz, M. (2017). Tincture of opium for treating opioid dependence: A systematic review of safety and efficacy. *Addiction*, 112(3), 415–429. <https://doi.org/10.1111/add.13628>
3. Feelemyer, J. P., Jarlais, D. C. D., Arasteh, K., Phillips, B. W., & Hagan, H. (2014). Changes in quality of life (WHOQOL-BREF) and addiction severity index (ASI) among participants in opioid substitution treatment (OST) in low and middle income countries: An international systematic review. *Drug and Alcohol Dependence*, 134, 251–258. <https://doi.org/10.1016/j.drugalcdep.2013.10.011>

