

Developments in Diabetes and Clinical Practice

Dr. Arjun Mehta*

Department of Clinical Psychology, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India

Introduction

Opioid addiction is a global crisis, associated with rising morbidity and mortality. Research has advanced in understanding neurobiology and developing effective therapies. This article discusses five areas: opioid neurobiology, substitution therapies, harm reduction, psychosocial interventions, and emerging treatment models.

Key Research Areas

Neurobiology of Opioid Dependence

Opioids hijack brain reward circuits, causing tolerance and withdrawal [1].

Substitution Therapies

Methadone and buprenorphine are widely used for maintenance treatment [2].

Harm Reduction Strategies

Needle exchange and supervised injection programs reduce HIV and overdose deaths [3].

Psychosocial Interventions

Motivational interviewing and group therapy complement medical treatments [4].

Emerging Therapies

Extended-release formulations and vaccines against opioids are under development [5].

References

1. Volkow ND (2015) The brain on drugs: From reward to addiction. *Cell* 162: 712–725.
2. Mattick RP (2014) Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. *Cochrane Database of Systematic Reviews*.
3. Wodak A (2006) Do needle syringe programs reduce HIV infection among injecting drug users? *International Journal of Drug Policy* 17: 436–441.
4. Carroll KM (2017) The role of behavioral interventions in buprenorphine maintenance treatment. *American Journal of Psychiatry* 174: 738–747.
5. Kinsey BM (2014) Vaccine protection against heroin addiction. *PLoS ONE* 9: e115152.v

***Corresponding author:** Dr. Arjun Mehta, Department of Clinical Psychology, National Institute of Mental Health and Neurosciences (NIMHANS), Bangalore, India, Email: arjun.mehta@nimhans.ac.in

Received: 01-March-2025, Manuscript No. JDCE-25-170183; **Editor assigned:** 4-March-2025, Pre-QC No. JDCE-25-170183 (PQ); **Reviewed:** 20-March-2025, QC No. JDCE-25-170183; **Revised:** 26-March-2025, Manuscript No. JDCE-25-170183 (R); **Published:** 30-March-2025, DOI: 10.4172/jdce.1000294

Citation: Arjun M (2025) Developments in Diabetes and Clinical Practice. *J Diabetes Clin Prac* 8: 294.

Copyright: © 2025 Arjun M. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.