Improving outcomes in opioid dependence: An exploration of the barriers and facilitators to detoxification, and process evaluation of a randomised, placebo-controlled trial of baclofen to support withdrawal

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Background

- Opioid dependence is a major global public health concern (Kimber et al., 2019). While provision of opioid substitution treatment (OST) improves physical and mental health, many patients express a desire to detox (O'Connor et al., 2020).
- Cessation of OST in those who are physiologically dependant triggers a myriad of unpleasant symptoms (Figure 1) – e.g. insomnia, anxiety, restless legs. There are no medications licensed in the UK that target the underlying neurobiology of withdrawal (Paterson et al., 2022).
- **FORWARDS-2** is a randomised, placebo-controlled, proof-of-concept clinical trial assessing the therapeutic potential of baclofen (30-60mg daily) in facilitating detoxification from methadone in opioid-dependent individuals. ***Status:*** *n participants randomised = 12.*
- **AWARD** is a qualitative sub-study exploring attitudes towards OST and detoxification in service users, treatment providers, and funding commissioners. ***Status:*** *n=2 service users, n=2 treatment providers.*

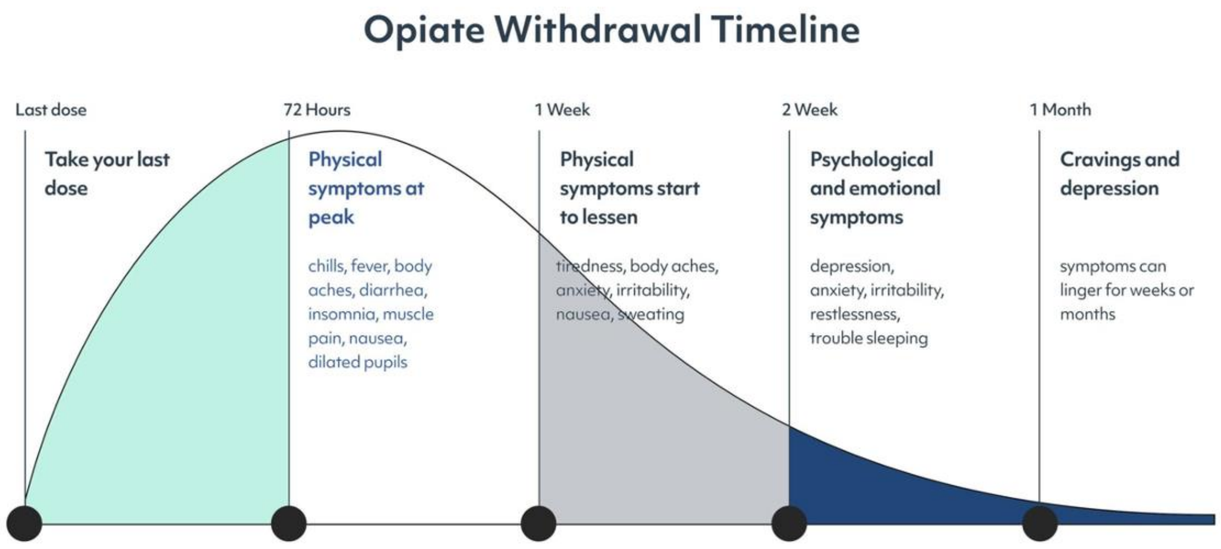


Figure 1: Opiate withdrawal timeline (reproduced from Summit Detox & Residential, 2024)

The **primary research aim** is to elucidate the barriers and facilitators to detoxification from OST, and examine the feasibility of conducting a randomised trial of baclofen versus placebo for supporting opiate detoxification.

Data collection

Process evaluation

Systematic Review
- Research question*: What are the barriers and facilitators to the initiation or completion of detoxification from OST?*
- Electronic databases searched: MedLine, Embase, PsychInfo, CINAHL.
- Eligible papers:
  - Abstract screen – 1462
  - Full-text review – 80
  - Data extraction – 7/19 papers, to date

FORWARDS-2
- Compliance with trial visits, study drug, questionnaires.
- Clinical variable changes e.g., anxiety, depression, restless legs (from Screening/ Baseline to Week-12 Visit).
- Entry/Exit interviews – e.g., experience of OST, barriers/ facilitators to detox.
- Recruitment & retention rates.
- Resources required for delivery.
- Sociodemographic data.

AWARD
- Interviews with trial staff & participants – receipt of the intervention, compliance with visits/study drug, expected & unexpected mechanisms of impact, attitudes towards detoxification & OST.
- Interviews with non-trial staff (service users, treatment providers, funding commissioners) – attitudes towards detoxification & OST.

Barriers & facilitators to detoxification

Data Analysis

- An inductive, semantic approach to thematic analysis will be employed on interview transcripts using Atlas.ti software.
- Descriptive quantitative information on fidelity, dose, reach, and feasibility will be compared between sites (NHS vs third-sector) and arms (baclofen vs placebo) where applicable. Trial compliance and retention measures compared between sites (NHS vs third-sector) and arms (baclofen vs placebo).
- Changes in clinical mediators will be assessed through multiple linear regression to determine predictors of successful detoxification.

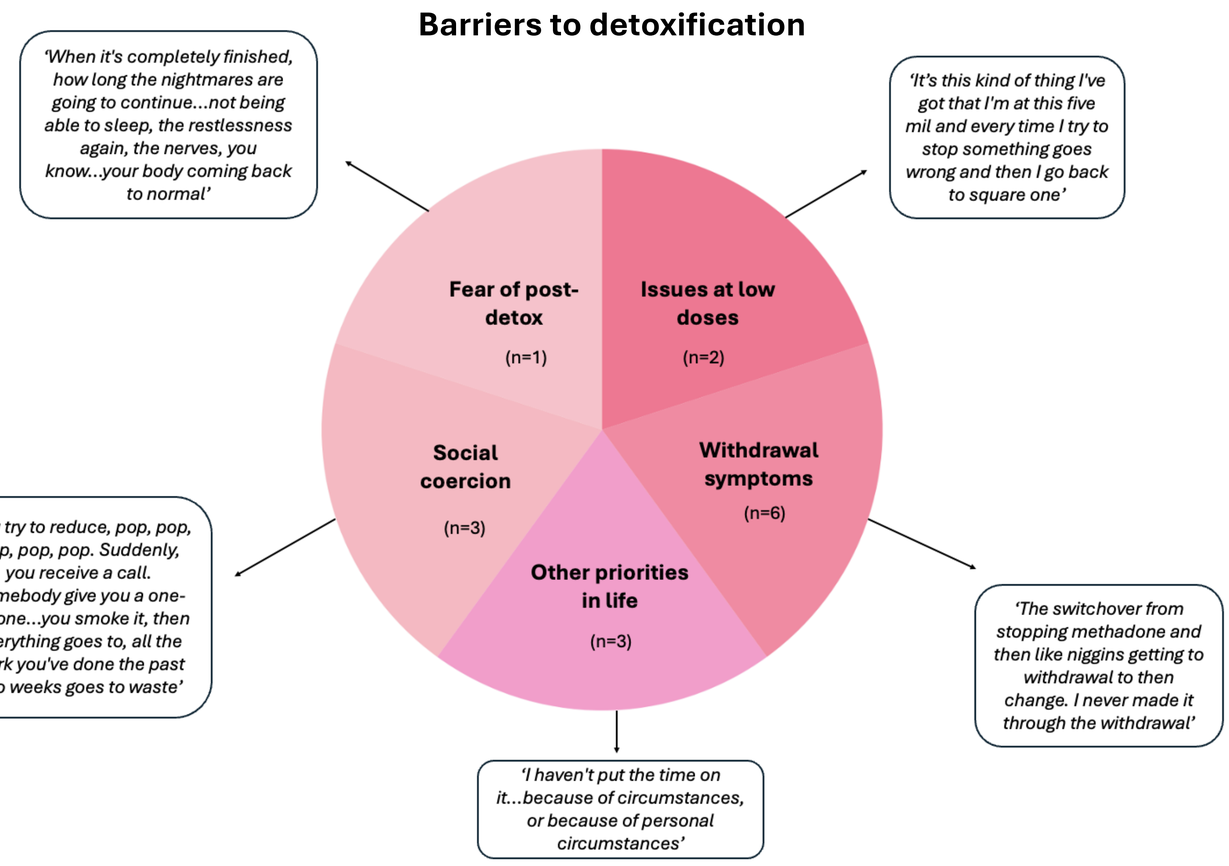
Results (to date)

Systematic review (papers =7)

Barriers to initiation or completion:
- Severity of withdrawal symptoms at low-doses of OST (p=1)
- Fear of withdrawal (p=2) and return of emotions (p=1) – e.g. one participant described fear that as he continued to taper and ultimately discontinue buprenorphine, he might return to depression
- Inability to function normally - "I couldn't think", "I couldn't work" (p=1)
- Withdrawal symptoms during OST tapering (p=2)
- Younger age and outpatient post-detoxification plan (p=1)
- Simultaneous use of other drugs (p=2)
- Psychiatry instability (p=1)

Facilitators to initiation or completion:
- Dislike of buprenorphine (p=1)
- Longer initial period of methadone stabilisation (p=1)
- Those who successfully detoxed had: Generally steady to employment; no welfare history; middle class background; majority high school graduates; generally clean urine reports over detox period; cooperative with program regulations; good relationships with counsellors; younger short-term addicts (p=1)
- Inpatient post-detoxification plan (p=1)

FORWARDS-2 interviews (n=9)



→ Too early to report results from the AWARD sub-study or process evaluation

Output & implications

- Understanding of attitudes towards available treatment options for opioid dependence, and how they may differ between service users, treatment providers, and funding commissioners. These insights will help inform where clinical and scientific attention should be focussed to improve outcomes.
- Identification of contextual factors that impact delivery of a novel intervention for community-based opioid detoxification, and the barriers/facilitators to implementation into clinical practice. Should baclofen (30-60mg daily) fail to prove efficacy, the process evaluation will capture whether this can be attributed to the delivery of the intervention, or lack of efficacy surrounding the intervention itself.

References

Kimber J, Hickman M, Strang J, Thomas K, Hutchinson S. Rising opioid-related deaths in England and Scotland must be recognised as a public health crisis. Lancet Psychiat. 2019;6(8):639-40.
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For Systematic Review references, please refer to the QR code.