



**MEDICATIONS FOR OPIOID USE DISORDER
AND RISKY SEXUAL BEHAVIOUR IN FEMALE
OPIOID USERS: A SYSTEMATIC REVIEW**

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RATIONALE FOR THE STUDY

- Risky sexual behaviour (RSB) is defined as any act which increases an individual's risk of contracting a viral infection.

(Chawla & Sarkar, 2019)

- Increased substance use is associated with certain high-risk sexual activities:

- Condom use
- Sex with multiple or high-risk partners
- Transactional sex

(Derese, Seme & Misganaw, 2014)

- High overlap between sexual and drug use networks in female opioid users.
- Interventions cannot reduce RSB in substance use populations without first reducing illicit substance use.

(Lollis, Strothers, Chitwood, & McGhee, 2000)



MEDICATIONS FOR OPIOID USE DISORDER (MOUD)

- The prescription of a drug with an action similar to that of a substance of dependence, but with a reduced risk attached to it.

(Gowing, Farrell, Boremann, Sullivan, & Ali, 2008)

- MOUD replaces illicit opioids with medically prescribed opioids (methadone/buprenorphine).
- Treatment with MOUD reduces the urgency around seeking illicit substances, in turn reducing high-risk behaviour.
- Engagement in MOUD further increases access to treatment agencies, improving health, quality of life and social support.

(Azim, Bontell, & Strathdee, 2015)



AIMS OF THE REVIEW

- To discuss the effects of treatment with MOUD on female RSB and the mechanisms of action.
- To review the current literature's ability to assess gender specific RSB in drug user populations and the definitions used.
- To discuss the impact of engagement in MOUD on female sexual and reproductive health and engagement in such services.



CRITERIA FOR STUDY INCLUSION

Criteria:

- Female data
- Uses a form of MOUD as an independent variable
- Includes at least one risky sexual behaviour outcome

- Included all types of original quantitative study design.
- Included studies with both gender data (if stratified).
- Included Sex Risk Composite scores as an outcome.



METHODS

- Four search engines (Medline, Embase, PubMed and Web of Science).
- Title and abstract searches conducted based on the criteria, with remaining papers read in full.
- Authors contacted to retrieve stratified data or to gain access to a paper.

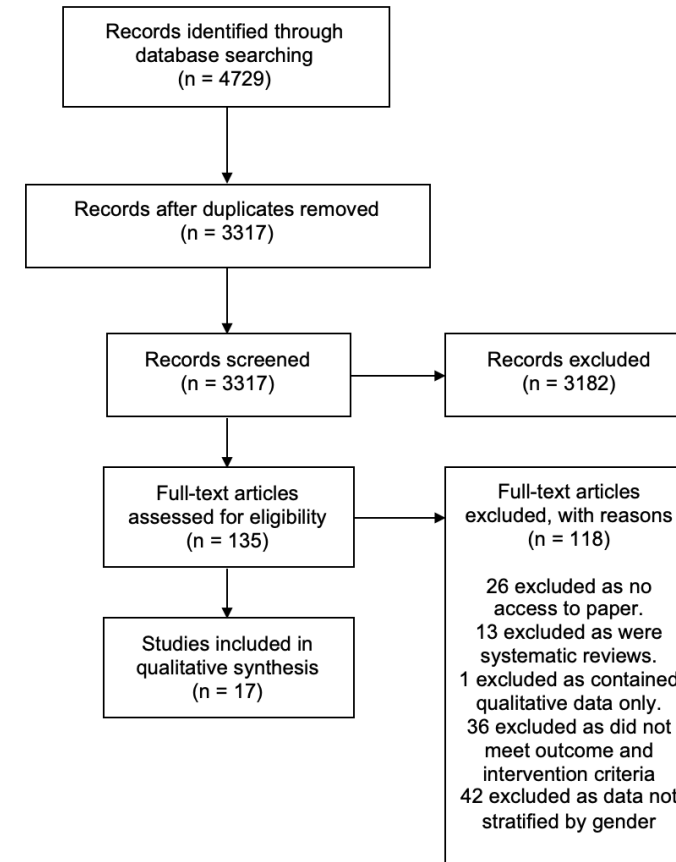
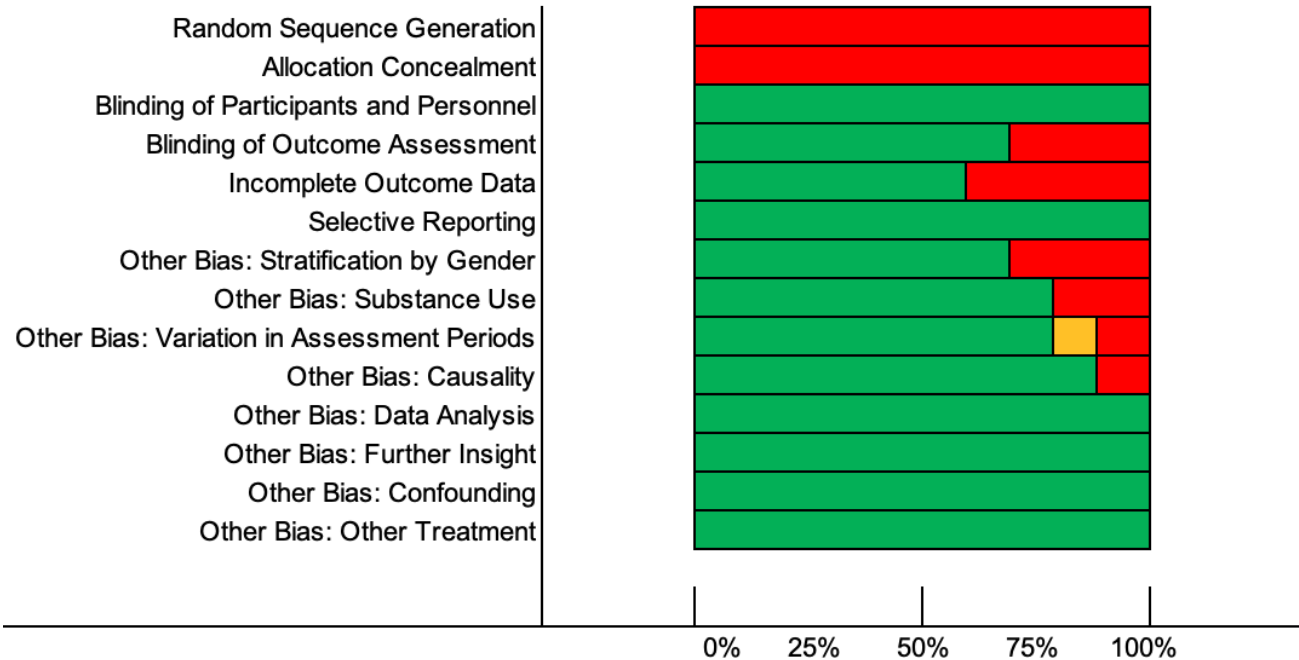


Figure 1. PRISMA Study Flow Diagram



METHODS



- Data extracted from 17 remaining studies and risk of bias assessments conducted.
- Meta-analysis not feasible due to lack of data and high variation between studies. A narrative review was instead conducted.

Figure 2. Risk of Bias Estimates



METHODS

Table I. Included Studies and Outcomes Measured

Study	n	Outcomes Measured			
		Condom Use	Multiple Sex Partners	Transactional Sex	Sex Risk Composite Score
Baker et al. (2001)	135				Y
Camacho et al. (1996)	103	Y	Y		
Chatham et al. 1999)	136	Y		Y	Y
Chen et al. (2009)	38	Y	Y	Y	
Grella et al. (1996a)	158	Y	Y	Y	
Grella et al. (1996b)	224			Y	
Grönbladh et al. (1989)	34			Y	
Hoff et al. (2017)	380	Y	Y	Y	Y
Keenan et al. (1993)	45	Y	Y		
Litchfield et al. (2010)	34			Y	
Majer et al. (2017)	106			Y	
Marchand et al. (2012)	97			Y	
Meade et al. (2010)	61	Y	Y		
Soyka et al. (2012)	365			Y	
Tross et al. (2009)	515	Y	Y	Y	
Wells et al. (1996)	135	Y	Y	Y	
Woody et al. (2014)	236	Y	Y		Y



RESULTS

OUTCOME	KEY FINDING
Condom Use	No significant effect of MOUD on condom use throughout all 10 studies measuring this outcome
Multiple Sex Partners	Six of nine studies measuring this outcome found a significant reduction in number of sexual partners with engagement in treatment with MOUD. Significant reduction in numbers of casual (Hoff et al., 2017) and IDU (Wells et al., 1996) sex partners
Transactional Sex	Five studies reported significant reductions in sex work instances as a result of treatment with MOUD
Sex Risk Composite	All but one of the four studies reporting a sex risk composite score found significant decreases as a result of MOUD



DISCUSSION: CONDOM USE

- Results of this systematic review were in line with previous literature across both genders.
(Mitchell, Kelly, Brown, O'Grady, & Schwartz, 2012)
- Male partners demonstrate more condom barriers than women, who show superior skills and knowledge of condoms.
(Calsyn et al., 2013)
- While women have the information, motivation and behavioural skill to use condoms, they lack self efficacy in negotiating condom use with male partners.
(Bryan, Fisher, Fisher, & Murray, 2000)
- Female condoms as a solution to male condom use negotiations.
- Risks associated with pregnancy in female opioid users and other contraceptive solutions.
(Keenan, Dorman, & O'Connor, 1993)



DISCUSSION: MULTIPLE SEX PARTNERS

- In line with the literature, engagement in MOUD led to a reduction in number of sex partners across most studies included in this systematic review.

- HIV awareness interventions.

(Qian et al., 2008)

- Reduced inhibition associated with substance use.

(Feaster et al., 2016)

- Issues around measures used in recording multiple sex partners and the cross over with transactional sex.



DISCUSSION: TRANSACTIONAL SEX

- In line with the literature, this review found a reduction in transactional sex with engagement in treatment with MOUD.
- Primarily, this is believed to be as a result of the reduction in the economic burden of substance use:
 "you have to be addicted to something to be a prostitute" (Bahna & Gordon, 1978, p. 644)
- Stigma, marginalization and criminalisation of both sex work and substance use reduces women's access to community treatment and social support networks.
(Ippoliti et al., 2017)
- Future research should focus on how to reach such populations and engage them in both MOUD and reproductive health services.



DISCUSSION: SEX RISK COMPOSITE

- In line with the rest of this review, all but one study reporting on this outcome found a significant reduction as a result of treatment with MOUD.
- Baker et al., (2001): high risk of bias due to illicit substance use throughout treatment may explain the non-significant findings.



DISCUSSION: LIMITATIONS

- Limited gender-specific research into MOUD and RSB.
 - Low number of studies
 - Limited stratified data
- The definition of RSB used throughout the literature.
- Lack of gender-specific measurements for RSB throughout the available literature.
- Lack of generalizability due to few studies providing data from lower income countries.



THANK YOU



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