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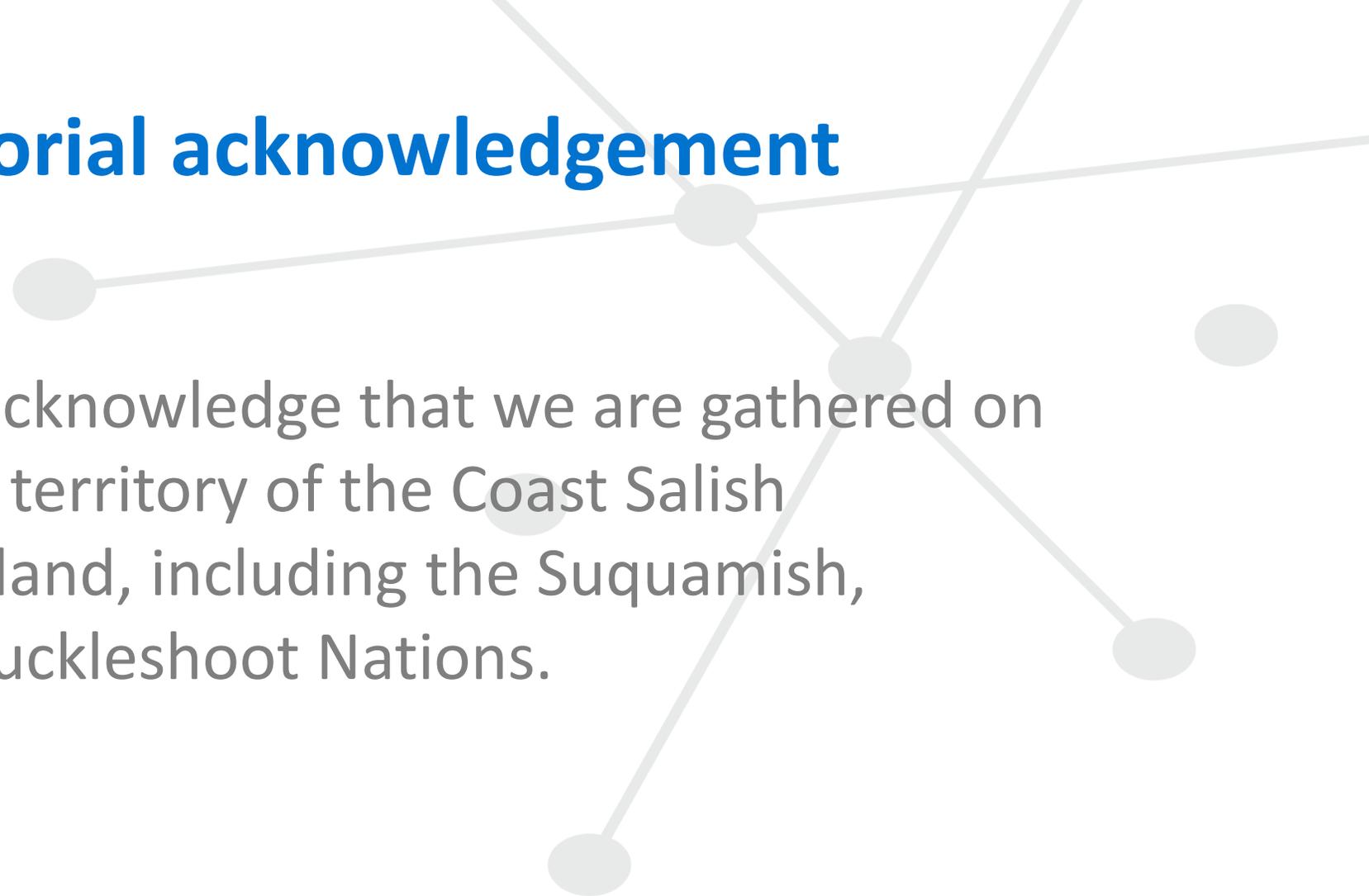
# Psycho-social interventions to address drug- and sexual-related harms among gay, bisexual and other men who have sex with men who use methamphetamine

28 June 2019

**Rod Knight, PhD**

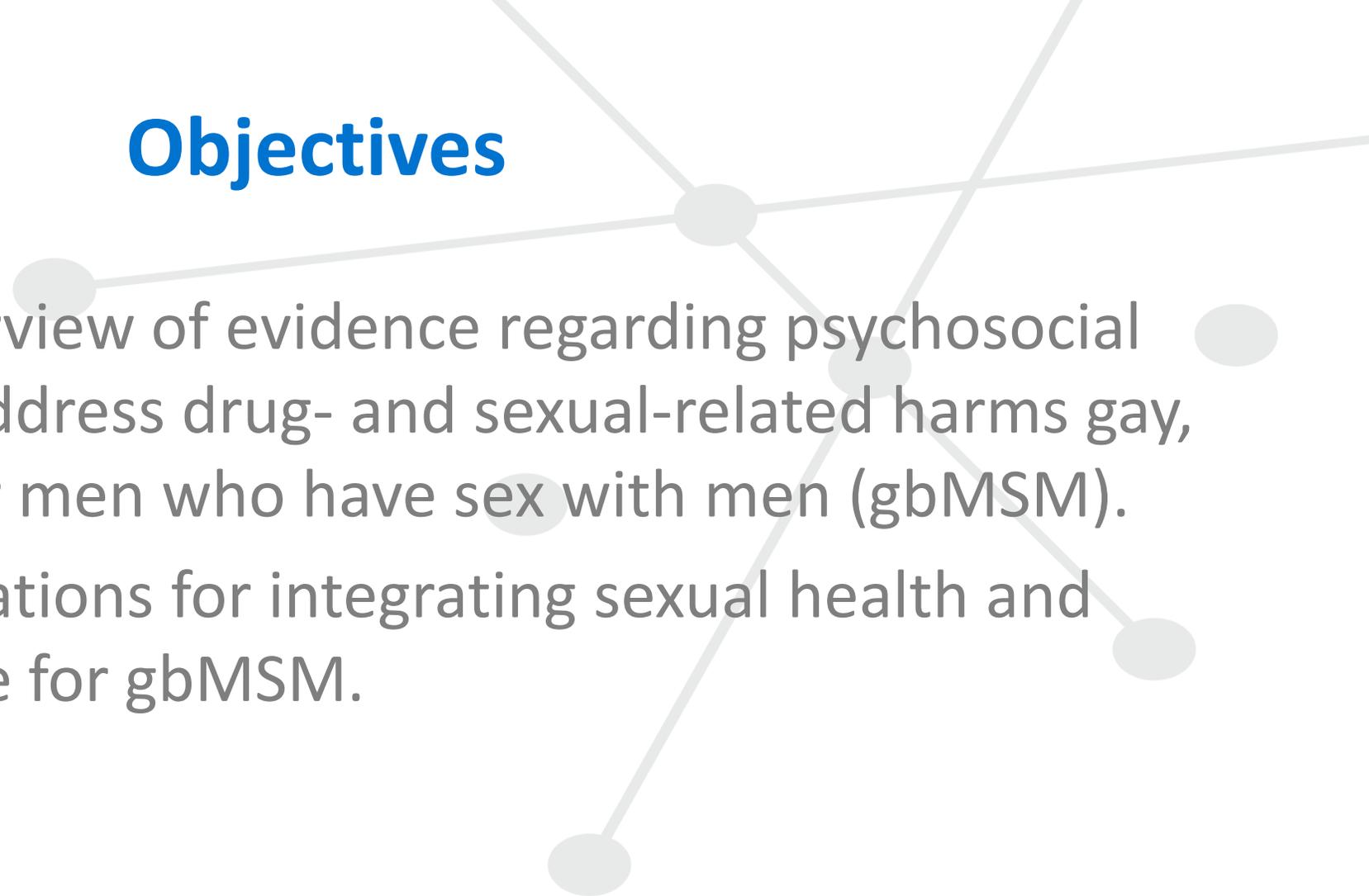
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Research Scientist, British Columbia Centre on Substance Use  
Scholar, Michael Smith Foundation for Health Research

# Territorial acknowledgement

A decorative graphic consisting of several grey lines of varying lengths and thicknesses, intersecting at various points. At these intersection points and at some line ends, there are solid grey circles of different sizes. The lines and circles are scattered across the upper and middle portions of the slide, creating a network-like or abstract geometric pattern.

I respectfully acknowledge that we are gathered on the traditional territory of the Coast Salish people of this land, including the Suquamish, Tulalip, and Muckleshoot Nations.

# Objectives



1. To provide an overview of evidence regarding psychosocial interventions to address drug- and sexual-related harms gay, bisexual and other men who have sex with men (gbMSM).
2. Discuss the implications for integrating sexual health and substance use care for gbMSM.

# Use and sexualized use of crystal methamphetamine among gay, bisexual and other MSM

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<http://onlinelibrary.wiley.com/doi/10.1002/jia2.25141/full> | <https://doi.org/10.1002/jia2.25141>

**JIAS**  
JOURNAL OF THE INTERNATIONAL AIDS SOCIETY

**VIEWPOINT**

## Investments in implementation science are needed to address the harms associated with the sexualized use of substances among gay, bisexual and other men who have sex with men

Rod Knight<sup>1,2,\*</sup> 

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**Keywords:** drug use; men who have sex with men; public health; STD/STI

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A growing body of epidemiological and behavioural research indicates that the use of both stimulants (e.g. cocaine, crystal methamphetamine) and depressants (e.g. alcohol, gamma-hydroxybutyrate—GHB), used alone or in combination, are among the primary contemporary drivers of HIV and other sexually transmitted and blood-borne infections (STBBI) experienced by some populations of gay, bisexual and other men who

while previous research has been helpful, some sub-groups of gbMSM are more at risk. Little is known about how the social contexts of sexualized substance use enhance gbMSM's ability to prevent or reduce harm. More research is known about the treatment and care of dependent gbMSM versus those who are not dependent.

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## Gay men who use crystal meth need integrated care

December 6, 2018 5:35pm EST

The growing trend of sexualised injection meth use — colloquially referred to as 'slamming' — is a growing public health concern due to the dual risk of transmission of HIV and other blood-borne viruses via both injection and sexual transmission. (Shutterstock)

**Author**

 **Rod Knight**  
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The use of cheap and potent crystal methamphetamine (meth) is reaching a "crisis point in Canada" and globally, replacing opioids as the drug of choice in some areas.

In media and policy conversations about this drug, one important population is often missed out: Gay, bisexual and other men who have sex with men (herein referred to as gay

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## Drug and Alcohol Dependence

journal homepage: [www.elsevier.com/locate/drugalcddep](http://www.elsevier.com/locate/drugalcddep)



### Interventions to address substance use and sexual risk among gay, bisexual and other men who have sex with men who use methamphetamine: A systematic review



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#### ARTICLE INFO

##### Keywords:

Methamphetamine  
Gay and bisexual men  
Men who have sex with men  
Sexual health

#### ABSTRACT

**Background:** Methamphetamine use is common among some populations of gay, bisexual and other men who have sex with men (gbMSM). This study reviewed the status of research on the efficacy of interventions that address harms among gbMSM who use methamphetamine.

**Methods:** We searched MEDLINE, PsycINFO, CINAHL, Embase, Cochrane Central Register of Controlled Trials, Web of Science, and Google Scholar to identify publications from inception to October 23, 2017, that assessed an intervention addressing methamphetamine use among gbMSM.

**Results:** Of 1896 potential studies and 935 unique articles screened for inclusion, 28 eligible studies assessed 26 different interventions in the following categories: pharmacological ( $n = 5$ ); psychosocial ( $n = 20$ ); harm reduction ( $n = 1$ ). Given that outcome variables were measured in highly variable ways, we were unable to conduct a meta-analysis of intervention effects. However, 22 studies reported a statistically significant effect on one or more methamphetamine-related outcomes. Among 21 studies that included measures of sexual health

# Findings

- Included a total of 26 different interventions assessed by 28 studies.
- Twenty-seven studies took place in the US and one in Australia.
- 16 randomized controlled studies and 12 pre-post study designs.
  - 22 of 28 studies reported a statistically significant effect on one or more meth-related outcomes.
  - Among 21 studies that included measures of sexual health-related outcomes, 18 reported a statistically significant effect on one or more sexual health-related outcomes.

# Psychosocial interventions – Contingency Management (n=11)

Study type	Evidence base	Quality	MA Use	Sexual health risk behavior
Pre-post	Carrico <i>et al.</i> (39)	Moderate	No	No
	Landovitz <i>et al.</i> (22)	Moderate	Yes	Yes
	Strona <i>et al.</i> (19)	Moderate	Yes	Yes
Randomized Controlled Trial (RCT)	Fletcher <i>et al.</i> (16)	Unclear	Yes	Not reported
	Fletcher <i>et al.</i> (17)	Unclear	No	Not reported
	Reback <i>et al.</i> (34)	Unclear	Yes	Not reported
	Reback <i>et al.</i> (37)	Unclear	No	Yes
	Shoptaw <i>et al.</i> (18)	Unclear	Yes	Not reported
	Menza <i>et al.</i> (33)	Low	No	Yes
	Nyamathi <i>et al.</i> (42)	High	Yes	Yes
	Shoptaw <i>et al.</i> (30)	High	Yes	Yes

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	<b>Strona <i>et al.</i> (19)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>
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	Menza <i>et al.</i> (33)	Low	No	Yes
	<b>Nyamathi <i>et al.</i> (42)</b>	<b>High</b>	<b>Yes</b>	<b>Yes</b>
	<b>Shoptaw <i>et al.</i> (30)</b>	<b>High</b>	<b>Yes</b>	<b>Yes</b>

# Psychosocial interventions – ‘Other’ (n=11)

Intervention	Study Type	Evidence base	Quality	MA Use	Sexual risk behavior
Motivational interviewing (MI)	RCT	Parsons <i>et al.</i> (36)	Unclear	Yes	Yes
	Pre-post	Zule <i>et al.</i> (25)	Moderate	Yes	Yes
Gay-specific cognitive behavioral therapy and gay-specific social support therapy	RCT	Shoptaw <i>et al.</i> (31)	Unclear	Yes	Yes
Resilient affective processing (RAP) intervention	RCT	Carrico <i>et al.</i> (40)	High	Yes	Not reported
Behavioral Activation	Pre-post	Mimiga <i>et al.</i> (23)	High	Yes	Not reported
Couple-based counselling	Pre-post	Wu <i>et al.</i> (21)	Moderate	Yes	Yes
Personalized cognitive counselling	RCT	Santos <i>et al.</i> (38)	Low	No	Yes
Text-based messaging	Pre-post	Reback <i>et al.</i> (24)	Moderate	Yes	Yes
Social-cognitive group-based	Pre-post	Lyons <i>et al.</i> (27)	Moderate	Yes	Yes
LGBTQ clinic-based counselling	Pre-post	Lea <i>et al.</i> (28)	Moderate	Yes	Not reported
Individual and group risk-reduction sessions	Pre-post	Reback <i>et al.</i> (29)	Moderate	Yes	Yes

# Psychosocial interventions – ‘Other’ (n=11)

Intervention	Study Type	Evidence base	Quality	MA Use	Sexual risk behavior
<b>Motivational interviewing (MI)</b>	<b>RCT</b>	<b>Parsons <i>et al.</i> (36)</b>	<b>Unclear</b>	<b>Yes</b>	<b>Yes</b>
	<b>Pre-post</b>	<b>Zule <i>et al.</i> (25)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>
<b>Gay-specific cognitive behavioral therapy and gay-specific social support therapy</b>	<b>RCT</b>	<b>Shoptaw <i>et al.</i> (31)</b>	<b>Unclear</b>	<b>Yes</b>	<b>Yes</b>
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<b>Couple-based counselling</b>	<b>Pre-post</b>	<b>Wu <i>et al.</i> (21)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>
Personalized cognitive counselling	RCT	Santos <i>et al.</i> (38)	Low	No	Yes
<b>Text-based messaging</b>	<b>Pre-post</b>	<b>Reback <i>et al.</i> (24)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>
<b>Social-cognitive group-based</b>	<b>Pre-post</b>	<b>Lyons <i>et al.</i> (27)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>
LGBTQ clinic-based counselling	Pre-post	Lea <i>et al.</i> (28)	Moderate	Yes	Not reported
<b>Individual and group risk-reduction sessions</b>	<b>Pre-post</b>	<b>Reback <i>et al.</i> (29)</b>	<b>Moderate</b>	<b>Yes</b>	<b>Yes</b>

# Pharmacological interventions + Psychosocial intervention (n=4)

Pharmacotherapies	Study type	Evidence base	Quality	MA use	Sexual risk behavior
Bupropion + substance use counseling	RCT	Das <i>et al.</i> (32)	High	No	No
Naltrexone + substance use counseling	RCT	Santos <i>et al.</i> (41)	High	Yes	Yes
Mirtazapine + substance use counseling	RCT	Colfax <i>et al.</i> (35)	Low	Yes	Yes
Modafinil + cognitive behavioral therapy	Pre-post	McElhiney <i>et al.</i> (20)	Moderate	No	Not reported

# Pharmacological interventions + Psychosocial intervention (n=4)

Pharmacotherapies	Study type	Evidence base	Quality	MA use	Sexual risk behavior
Bupropion + substance use counseling	RCT	Das <i>et al.</i> (32)	High	No	No
<b>Naltrexone + substance use counseling</b>	<b>RCT</b>	<b>Santos <i>et al.</i> (41)</b>	<b>High</b>	<b>Yes</b>	<b>Yes</b>
<b>Mirtazapine + substance use counseling</b>	<b>RCT</b>	<b>Colfax <i>et al.</i> (35)</b>	<b>Low</b>	<b>Yes</b>	<b>Yes</b>
Modafinil + cognitive behavioral therapy	Pre-post	McElhiney <i>et al.</i> (20)	Moderate	No	Not reported

# Summary

Intervention modality	Comments on evidence of efficacy regarding MA use and sexual behaviour
<b>Pharmacotherapies</b>	Limited efficacy for meth use and sexual behaviour.
<b>Psychosocial, behavioural and cognitive</b>	Limited to moderate efficacy for MA and sexual risk behaviour during intervention, particularly among non clinically addicted participants.
<b>Harm Reduction</b>	Limited evidence base to date.

# Discussion

- The evidence base involving gbMSM and meth treatment continues to grow; though, the results indicate limited to moderate effects.
- Our review supports previous research with other populations who use MA indicating that, while pharmacological interventions demonstrate limited efficacy for the treatment of MA, psychosocial interventions tend to hold more promise.
- Findings support the capacity for successful integration of substance use and sexual health care and services for gbMSM.



## Acknowledgements

- Co-authors and collaborators involved in this program of research
- Canadian Institutes of Health Research
- Michael Smith Foundation for Health Research