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BRIEF REPORT

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Integrating routine screening for pregnancy intention and contraceptive use into care of women who use alcohol or other drugs

Bridin Murnion[1,2] | **Vicki Chase**[3] | **Grace Carniato**[3] | **Kate Masters**[3] | **Kelly McNamara**[2,3,4]

[1]Drug and Alcohol Services, Northern Sydney Local Health District, Sydney, Australia

[2]Faculty of Medicine and Health, The University of Sydney, Sydney, Australia

[3]Drug and Alcohol Services, Central Coast Local Health District, Wyong, Australia

[4]School of Medicine and Public Health, University of Newcastle, Newcastle, Australia

Correspondence
Bridin Murnion, Drug and Alcohol Services, Northern Sydney Local Health District, Herbert Street, St Leonards, NSW 2065, Australia.
Email: bridin.murnion@sydney.edu.au

Abstract

Introduction: There are high rates of unplanned pregnancy and low rates of contraceptive use in women with substance use disorders. Women who use drugs experience many barriers to health. In addiction treatment services in New South Wales, Australia, patients undergo routine health screening on treatment entry and annually thereafter. An integrated pregnancy and contraceptive screening tool was developed. The aim of this cross-sectional study was to report the feasibility and preliminary outcomes of this tool.

Methods: A pregnancy intention screening (PIS) tool was developed and integrated into the electronic medical record and the annual routine screening. This tool consisted of four yes/no questions about current pregnancy, future pregnancy plans and contraceptive use. Responses to these questions are reported. Descriptive statistics were used to report demographic and outcome data.

Results: One hundred women were offered and completed the survey. There were low rates of effective or highly effective contraceptive use (24.5 percent of eligible participants). Seventy-four percent of participants wanted further information on contraception.

Discussion and Conclusions: As with other studies, our studies demonstrate low rates of contraceptive use and high rates of interest in contraception use among women who use drugs. The PIS tool was completed by all women to whom it was offered, suggesting high levels of patient acceptability. Integration of a PIS tool was effective in identifying women with contraceptive needs and was acceptable to women.

KEYWORDS
contraception, pregnancy, substance use, women

Key points

- A pregnancy intention screening tool was developed and integrated into routine screening.
- This four-question screen was feasible to administer.

- The screening tool identified low rates of use of effective or highly effective contraception.
- Most participants (74%) wanted further information on contraception.

1 | INTRODUCTION

There are high rates of unplanned pregnancy and low rates of contraceptive use in women with substance use disorders [1–3]. In the general population up to 44% of pregnancies and 22% of live births are unplanned compared with 75% of pregnancies in women who attend drug and alcohol services (DAS) [1, 4]. In reproductive-aged Australian women with substance use disorders, less than half of women who do not wish to conceive are using contraception [1]. However, in the Australian women in the general population, 95% of women who do not wish to conceive use some form of contraception. Of those who report using contraception, around 30% use highly effective methods, including male and female sterilisation and long-acting reversible contraception (intrauterine devices or hormonal implants) [5].

People who use drugs can find it difficult to access healthcare. For women, this can mean poor access to contraception and high rates of unplanned pregnancy [1]. Nonetheless, women who use drugs want to make informed choices about contraception [6].

Patients attending DAS in New South Wales have a comprehensive health and psychosocial screen undertaken using a template in the electronic medical record (eMR). This screen has domains relating to physical health, mental health, drug health, child protection and domestic violence. The screen is undertaken at the beginning of each treatment episode and annually thereafter. It is a reportable quality indicator in DAS in New South Wales.

Despite the multiple risks of inadequate access to contraception for women who use drugs, and the desire of these women to make informed choices about this, there was no domain for assessing contraception or pregnancy plans as a component of this routine screening, clearly a missed opportunity. Therefore a pregnancy intention screening (PIS) tool was developed and integrated into the eMR. The aim of this project was to assess the feasibility and outcomes of this integrated screening tool.

2 | METHODS

This cross-sectional study was undertaken in a publicly funded, outer metropolitan drug and alcohol service in New South Wales.

A PIS tool consisting of four questions was developed (Figure 1) and a template was inserted into the eMR in November 2020 (Figure S1). This was supported with education for the nursing staff who undertake regular screening, such that it was integrated into routine care.

Q1. Are you pregnant?

Q2. Are you planning a pregnancy?

Q3. Are you using contraception?

Q4. What type of contraception are you using?

FIGURE 1 Questions of the screening tool.

Routine administrative data of all women between the ages of 15 and 49 presenting to regional DAS outpatient clinics between 1 November 2020 and 1 June 2021 were reviewed to report baseline demographic information. The eMR of all women who were offered the PIS tool over the same time period (1 November 2020 and 1 June 2021) were identified.

In subjects who commenced the PIS data extracted from the eMR were:

a. age;
b. completion of screening;
c. responses to the screening questions;
d. outcome of screening; and
e. primary drug of choice.

Descriptive statistics about age, substance use and PIS responses were applied to the populations studied using Microsoft Excel (Microsoft Corporation 2022). Ethics approval was provided through the Research Governance Office of the Central Coast Local Health District, number 0621-060C. Strobe guidelines were followed in reporting this observational study [7].

3 | RESULTS

3.1 | Demographics

At the time of undertaking the project, there were 278 women aged between 15 and 49 years receiving treatment in Central Coast Local Health District DAS outpatient clinics. Twenty percent of these women identified as Aboriginal or Torres Strait Islander. The average age was 33.2 years. The majority ($n = 172/62\%$) identified opioids as their primary drug

of choice. A total of 140 were receiving buprenorphine and 79 methadone.

Of this population, in the 7 months of the study, 100 women who initiated contraceptive screening were identified through automated eMR review. No one offered screening declined to participate. All 100 women completed the screen. The average age was 31.6 years. The primary drug of choice was opioids for the majority (63%).

3.2 | Screening responses and outcomes

Of the 100 women who underwent screening, 94 were not planning a pregnancy. Of these 94, 63 women (67%) were not using any contraception (Figure 2).

Of the 31 women using contraception, 8 were using the less effective form of contraception of the male condom, 9 were the effective forms of the combined oral contraceptive pill or injectable contraception and 14 were using highly effective contraception (Figure 3). Seventy

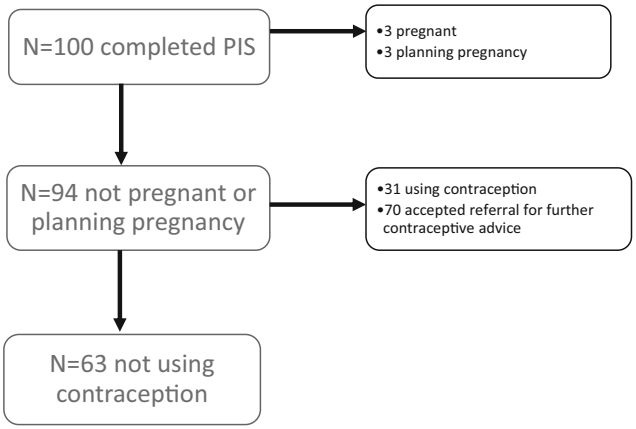

FIGURE 2 Pregnancy intention and contraceptive use in women receiving treatment for alcohol or other drug use. PIS, pregnancy intention screen.

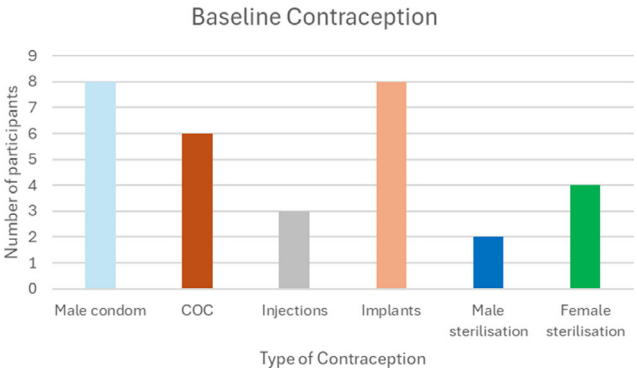

FIGURE 3 Contraceptive methods used by the 31 women using contraception. COC, combined oral contraceptive pill.

women (74%) accepted referral to the women's health project for further information about contraception. The women's health project was a separate initiative providing contraceptive counselling and supply, the results of which are reported elsewhere [8].

4 | DISCUSSION

In this study, we have uniquely demonstrated the feasibility of a pregnancy intention screening tool integrated into routine health screening to identify contraceptive, preconception and antenatal treatment needs in women receiving treatment for alcohol or other drug use. That all women who were offered the tool completed suggests this brief screening tool to be acceptable to this group.

Previous studies have consistently demonstrated women with substance use disorders have high rates of unplanned pregnancies [1, 3, 9], low rates of contraception use and typically use less effective methods of contraception, such as condoms [10]. Our study again demonstrates that despite almost all of our sample indicated they were not planning a pregnancy, 67% were not using contraception, higher than the 50% demonstrated in previous studies within Australian DAS [1]. The regional setting in our study may in part explain the lower use of contraception compared with other Australian DAS [1]. We also demonstrate low rates of use of more effective contraceptive methods, again consistent with previous findings [10]. But most of the women in our study wanted more information about contraceptive options.

Our study assessed a pregnancy intention screening tool embedded into the eMR in a drug and alcohol service. Pregnancy intention tools have been tested in DAS before, with the 'Desire to Avoid Pregnancy Scale' being evaluated within an opioid treatment program [11]. While the Desire to Avoid Pregnancy Scale has been validated for use in clinical settings as screening tool, it is a 14-point tool that does not assess contraception use [12, 13]. One Key Question is another pregnancy intention screening tool that consists of a single question that stimulates a conversation about preconception care or contraception, however, it has not been tested in a DAS [14]. We suggest our tool is simpler to use in drug and alcohol settings, where clinical staff may not have advanced skills in reproductive health care.

Women with substance use disorders are known to experience barriers to accessing sexual and reproductive health. This includes real and perceived stigma, risk of institutional re-traumatisation following sexual violence, shame over personal hygiene and the cost of appointments [15–17]. Women from rural and regional Australia

are known to experience additional barriers to accessing contraception care [18, 19]. The United Nations considers access to contraception a human right and has prioritised this in the sustainable development goals [20]. This screening tool allows regular assessment and early identification of women with unmet needs.

Women with substance use disorders are considered priority groups for preconception and antenatal care [21, 22]. Preconception care for women with substance use disorder focuses on maternal health optimisation and may include adjustments to alcohol or other drug treatment, Foetal Alcohol Spectrum Disorder prevention, prenatal vitamins and optimisation of co-morbid physical or psychological conditions [21]. Substance use disorder is associated with delayed or reduced access to antenatal care [23]. Systems issues such as delays in referral to maternity services are recognised as a barrier to accessing antenatal care, and our screening tool represents an opportunity to provide early referral [24].

The strengths of our project were that the screen was integrated into pre-existing systems, simple and easy to perform, and although acceptability was not formally evaluated no women declined to participate. This suggests generalisability of the tool. The limitations were that this was a small, single centre, quality improvement project and that it did not use a validated screening tool.

Future research should examine validation and incorporation of the PIS tool into routine screening in DAS settings more widely and compare it with other pregnancy intention screens. Services linking the outcomes of the PIS tool to a broader program of referral for accessible contraception, preconception or antenatal care should be developed. Evaluation of the rate of completion of the tool and outcomes from this could be included as reportable quality indicators to enhance use.

5 | CONCLUSION

It is feasible to integrate this simple screening tool into existing systems. High rates of completion indicate consumer acceptability. If this tool were to be integrated into the eMR as a component of routine screening it could enhance pregnancy and contraceptive planning in this priority group of women.

AUTHOR CONTRIBUTIONS

Bridin Murnion developed the protocol, contributed to collecting and analysing the data and drafting the manuscript. Vicki Chase contributed to developing the protocol, data collection and analysis and reviewing the manuscript. Kate Masters contributed to data collection and reviewing the manuscript. Grace Carniato contributed to data collection and reviewing the manuscript. Kelly McNamara contributed to collecting and analysing the data and drafting the manuscript.

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None.

CONFLICT OF INTEREST STATEMENT

The authors Bridin Murnion, Vicki Chase, Kate Masters and Kelly McNamara have no interests to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

Bridin Murnion https://orcid.org/0000-0001-7791-3025

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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