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ORIGINAL ARTICLE

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High-risk sexual behaviours in young people experiencing a first episode of psychosis

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Abstract

Aim: The sexual health of adults with schizophrenia is poorer than the general population; however, less is known about young people experiencing a first episode of psychosis (FEP). The aim of this study was to explore the high-risk sexual behaviours and sexual well-being indicators of a cohort of young people with FEP.

Methods: Data collected from young people (15-24 years) with FEP attending the EPPIC service in Melbourne and participating in a physical health intervention were analysed. Baseline trial data collected on sexual health and high-risk behaviours, psychiatric symptomology, functioning, and substance use are presented by gender. Associations between symptomology and functioning with sexual behaviour are explored.

Results: A total of 69 young people were included in this study; mean age was 19.6 years (SD±2.8), 53.6% were male, 59.6% identified as heterosexual, and 21.7% were currently in a relationship. Within the cohort, 78.3% had ever been sexually active. Of these, 44.2% consistently used a condom at last sex act and 35.7% used barrier contraception consistently, 22.5% had previously been pregnant, and 18.6% had tested positive for an STI. Finally, young people were more likely to have been sexually active if they were currently using substances.

Conclusions: These findings suggest that high rates of high-risk sexual behaviour remain an issue for young people experiencing a first episode of psychosis. Promoting sexual well-being and communication skills between sexual partners should be targeted to ensure that high-risk sexual health outcomes are mitigated as early as possible.

KEYWORDS
early intervention, early psychosis, physical health, sexual health

1 | INTRODUCTION

It is now well established that people with mental ill-health experience significant health inequalities throughout their lives (Firth et al., 2019). Not exempt from these disparities is sexual health, with a substantially increased incidence of blood-borne viruses such as HIV, Hepatitis B and C (Hughes et al., 2016; Rosenberg et al., 2001). Sexual health is broader than being free from sexually acquired infections (World Health Organization, 2006), and there are several other areas of concern for individuals with mental illness. These include; increased rates

of high-risk sexual behaviour (Elkington et al., 2010), reduced use and access to contraceptives and higher levels of terminations of pregnancy (Coverdale et al., 1997; Seeman & Ross, 2011), sexual dysfunction (Montejo et al., 2010), and exploitation and violence in sexual relationships (Khalifeh et al., 2015; Trevillion et al., 2012).

The reasons behind poorer sexual health in this population are multifaceted and inter-related. For example, individuals with mental ill-health are more vulnerable to engaging in behaviours that are related to infection with blood-borne viruses. Additionally, engaging in unprotected sex with multiple partners, trading sex in exchange for a commodity (e.g., money, shelter, food) (Meade & Sikkema, 2007), using intravenous drugs (or having a sexual partner who injects drugs) (Osher et al., 2003), and engaging in sexual activity while under the influence of alcohol or drugs (Weinhardt et al., 2001) have all been found to impact high-risk sexual behaviours in this cohort. Hypersexuality during an acute phase of mental ill-health can also exacerbate these behaviours (Basco & Celis-de Hoyos, 2012). Another construct of sexual health, sexual dysfunction, has been linked to psychotropic medication (antipsychotics and antidepressants) (Zemishlany & Weizman, 2008) which is likely to add further complexity to the holistic presentation. Furthermore, amotivation and anhedonia, which can be features of depression as well as negative psychotic symptoms, can also impact sexual health and behaviour. These factors speak to the complexity that individuals with mental ill-health can present with to mental health services, particularly around co-morbid alcohol and other drug use (Regier et al., 1990). There remains a need to address an individual's sexual health alongside their mental health presentation.

One challenge with the current evidence base is that nearly all evidence of poor sexual health in individuals with mental ill-health comes from adult samples (over 18 years). This is despite adolescence/young adulthood being a key time within an individuals sexual development, as well as the time that at least 50% of mental health problems first present (Jones, 2013). The limited research to date shows that young people affected by a range of mental health disorders have higher rates of high-risk sexual behaviours (Adan Sanchez et al., 2019; Pehlivan et al., 2021). While these studies presented trans-diagnostic data of young people with mental illness, two other studies have looked at the sexual health of young people experiencing a first episode of psychosis (Brown et al., 2010; Shield et al., 2005). Ensuring the sexual health needs of young people experiencing a first episode of psychosis (FEP) are addressed as early as possible should be a key component of the care provided by comprehensive Early Intervention in Psychosis (EIP) services.

Understanding the magnitude of the issue within FEP populations will help with the development and delivery of such services. Some work has been undertaken in this area, albeit 10–15 years ago. For example, in an Australian cross-sectional survey (Shield et al., 2005), it was found that nearly a third of young people with a first episode of psychosis were concerned that they had engaged in unsafe sex in the previous year. In addition, two-thirds had had an STI screen, with 15% of the sample reporting having had an STI previously. Another Australian cross-sectional survey (Brown et al., 2010) reported that those with FEP were significantly less likely to report consistently using a condom with a casual partner than a control group. One in five individuals in the sample had been pregnant/had a partner who had been pregnant, with nearly a fifth of the clinical sample reporting that they have engaged in sex trading.

With both these studies being undertaken over a decade ago, further data are required to address the critical evidence gaps on the sexual health of young people with FEP. Therefore, this study aims to determine: (i) the prevalence of high-risk sexual behaviours of a cohort of young people experiencing a FEP, and (ii) whether there is an association between high-risk sexual behaviours and clinical symptomology and functioning.

2 | METHODS

2.1 | Setting

Participants were recruited from Orygen, a specialist mental health service based in the North-Western area of Melbourne, Australia, for young people aged between 15 and 24. The Early Psychosis Prevention and Intervention Centre (EPPIC) service within Orygen provides care to approximately 400 young people with FEP each year from a geographically defined catchment area of over 1 million residents, of which approximately 200 000 are aged 15 to 24.

2.2 | Participants

The current study includes individuals who agreed to participate in the Physical Health Assistance in Early Recovery of Psychosis trial (PHAstER) between August 2018 and December 2020, details of which can be found in the published protocol (O'Donoghue et al., 2020) including detailed recruitment processes. Essentially, young people were eligible to participate if they were a) receiving care at EPPIC and thereby resided within the service's geographically defined catchment area, b) aged between 15 and 24; c) experiencing a first episode of psychosis (as confirmed using the Structured Clinical Interview for the DSM (SCID, [First, 2014]), who have just commenced (within 30 days) antipsychotic medication, and d) had the ability to provide informed consent. All young people who were accepted into the EPPIC services while recruitment was open were approached about the trial. Participants of the trial were randomized to receive additional care with a physical health nurse or 'treatment as usual'; however, the assessments analysed here were undertaken at baseline - therefore data were not affected by the intervention.

2.3 | Measures

This paper presents data collected at baseline during the PHAstER trial. These data were collected by research assistants once participants consented to participate in the randomized controlled trial and

before randomisation to the control or intervention group. This included symptomology and functioning measures collected by the research assistant and self-report measures (demographics, sexual health questionnaire, substance use).

2.3.1 | Demographics

Demographic data were collected on gender, sexual identity, relationship status, country of birth, Aboriginal and Torres-strait islander status, and NEET (not in education, employment or training) status.

2.3.2 | Sexual health questionnaire

A questionnaire on sexual health was devised for a previous study that was undertaken at Orygen (McMillan et al., 2017), which has been adapted from an instrument developed by the Australian Research Centre in Sex, Health & Society (ARCSHS) (Smith et al., 2009). These items include questions relating to current sexual partners, sex, condom and contraceptive use, history of sexually transmitted infections, and pregnancy.

2.3.3 | Symptomology and functioning

The 24-item Brief Psychiatric Rating Scale (BPRS) (Overall & Gorham, 1962) is a clinician-rated scale covering a range of psychiatric symptoms such as depression, anxiety, hallucinations and unusual behaviour. A total score (ranges between 24 and 168) gives an indication of overall psychopathology with higher scores corresponding with higher levels of illness. The five items relating to positive psychotic symptoms were used as a subscale for psychotic symptoms (Velligan et al., 2005). The Schedule for Assessment of Negative Symptoms (SANS) was used to measure negative symptoms (Andreasen, 1983). This 25-item measure produces a score between 0 and 125, with a score of 50 representing moderate illness' (Levine & Leucht, 2013). The Social and Occupational Functioning Assessment Scale (SOFAS) was used to subjectively rate the client's social, occupational and psychological functioning with a single score out of 100, capturing the assessor's perspective on the level of functioning. Finally, the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST, [WHO ASSIST Working Group, 2002]) was undertaken, which asks participants their current or lifetime use of tobacco or other substances (alcohol, cannabis, cocaine and amphetamines). 'Current' 'use' was classified as daily or weekly use. This measure has been validated for use in FEP populations (Hides et al., 2009).

2.4 | Statistical analysis

Demographic, sexual health, and symptomology data are presented descriptively as a total of the sample and by gender (male vs. female), given gender differences are reported in sexual health literature. Gender differences were explored using the appropriate statistical test (*t*-tests or Mann–Whitney tests for continuous data and chi-square tests for dichotomised data). Sub-analyses were not completed on samples of 5 or less due to the potential for data to become identifiable. A Bonferroni correction was applied to the pairwise comparisons undertaken for the analysis of demographic characteristics, clinical characteristics and sexual health behaviours by gender, resulting in a significance level of <.001.

Multivariate logistic regression models were used to evaluate the association between symptomology and functioning (independent variable) with sexual behaviour (dependent variable) while controlling for confounders including age and gender. Specifically, we looked at the impact of BPRS, SANS, and SOFAS scores and current substance use on sexual behaviours including being sexually active, using a condom at the last sex act, and consistent contraception use. Given the small numbers expected for other important risk factors, a combined risk indicator was created to identify those who either had an unexpected pregnancy or tested positive for an STI. Missing data were imputed using Multiple Imputation by Chained Equations (MICE) (Van Buuren & Groothuis-Oudshoorn, 2011). Data processing and analyses were conducted using SPSS v26 and R version 4.0.2 (2020-06-22).

2.5 | Ethics

Ethical approval for the trial was obtained from Melbourne Health HREC (ref HREC/18/MH/77).

3 | RESULTS

3.1 | Demographic characteristics

The PHAstER trial had assessed 365 young people at the time that the current baseline data were extracted. The majority ($n = 265$) were excluded due to not meeting the inclusion criteria, such as having less than 30 days exposure to antipsychotics. The remainder declined to participate. A total of 69 young people were included in this current sample, of which 59.6% ($n = 37$) were male, 42.0% ($n = 29$) were female and 4.3% ($n = 3$) gender diverse. The mean age was 19.6 years (SD ± 2.8). The majority of the cohort were born in Australia or New Zealand (82.6%, $n = 57$), with 4.5% ($n = 3$) identifying as Aboriginal or Torres Strait Islander. The majority (78.3%, $n = 54$) lived with their family of origin, and 30.4% ($n = 21$) were not in education, employment or training (NEET).

Regarding sexual orientation, 59.6% ($n = 34$) identified as heterosexual, 10.5% ($n = 6$) bisexual, 5.3% ($n = 3$) pansexual, 5.3% ($n = 3$) asexual and 12.3% ($n = 7$) reported being not sure. Most individuals were single (78.3%, $n = 54$), with 10.1% ($n = 7$) having been in a relationship for over 2 years, 8.7% ($n = 6$) in a relationship between

TABLE 1 Demographics of included participants

	Total cohort ($N = 69$)	Male ($n = 37$)	Female ($n = 29$)	Statistical test of difference	*p*-value
Age (Mean ± SD)	19.6 (2.8)	20.2 (2.5)	19.0 (2.8)	$F = .69$, $df = 1$	.41
Gender identity ($n = 69$)					
Male	37 (53.6%)	–	–	–	–
Female	29 (42.0%)	–	–		
Gender diverse	3 (4.3%)	–	–		
Sexual identity ($n = 53$)					
Heterosexual	34 (59.6%)	21 (56.8%)	12 (54.5%)	$X^2 = .67$, $df = 1$	.41
Homosexual	0	0	0		
Bisexual	6 (10.5%)	3 (8.1%)	2 (9.1%)		
Pansexual	3 (5.3%)	–	–		
Asexual	3 (5.3%)	–	–		
Not sure	7 (12.3%)	3 (8.1%)	3 (10.3%)		
Relationship status ($n = 69$)					
Single	54 (78.3%)	28 (75.7%)	23 (79.3%)	$X^2 = 7.8$, $df = 3$	.05
In a relationship – less than 3 months	2 (2.9%)	–	–		
In a relationship – 3 months to 2 years	6 (8.7%)	1 (2.7%)	5 (17.2%)		
Married/de facto – over 2 years	7 (10.1%)	6 (16.2%)	1 (3.4) %		
Country of birth					
Australia/New Zealand	57 (82.6%)	28 (75.7%)	26 (89.7%)	$X^2 = 3.3$, $df = 4$	.51
Other	12 (17.4%)	9 (24.3%)	3 (10.2%)		
Aboriginal or Torres Strait Islander ($n = 67$)	3 (4.5%)	–	–		
Current co-morbid substance use					
Tobacco	28 (40.6%)	15 (40.5%)	12 (41.4%)	$X^2 = .87$, $df = 4$	.93
Alcohol	9 (13.9%)	6 (16.2%)	2 (7.1%)	$X^2 = 3.57$, $df = 4$	.47
Cannabis	12 (21.6%)	7 (18.9%)	5 (17.8%)	$X^2 = 4.46$, $df = 4$	.49
Cocaine	1 (1.5%)	–	–		
Amphetamines	5 (7.7%)	–	–		
Ever used substances					
Tobacco	50 (72.5%)	27 (73.0%)	20 (69.0%)	$X^2 = .26$, $df = 1$	.60
Alcohol	53 (76.8%)	31 (83.8%)	19 (65.5%)	$X^2 = 3.07$, $df = 1$	.08
Cannabis	47 (68.1%)	27 (73.0%)	17 (60.7%)	$X^2 = 1.50$, $df = 1$	.22
Cocaine	32 (46.4%)	19 (51.4%)	11 (39.3%)	$X^2 = 1.40$, $df = 1$	.24
Amphetamines	36 (52.2%)	23 (62.2%)	11 (39.3%)	$X^2 = 3.83$, $df = 1$	.05
Education or employment status					
NEET	21 (30.4%)	12 (32.4%)	7 (24.1%)	$X^2 = .55$, $df = 1$	.46
Current accommodation					
With family of origin	54 (78.3%)	29 (78.4%)	23 (79.3%)	$X^2 = .01$, $df = 1$	.93
Rented room	3 (4.3%)	–	–		
Rented house/flat	5 (7.2%)	–	–		
Owned house/flat	1 (1.4%)	–	–		
Homeless or couch-surfing	4 (5.8%)	–	–		
Other	1 (1.4%)	–	–		
BPRS score (Mean ± SD)	57.5 (13.0%)	53.1 (11.2%)	61.4 (13.8%)	$F = 2.76$	.01
BPRS psychosis subscale (Mean ± SD)	19.0 (5.5%)	18.4 (6.1%)	19.1 (4.7%)	$F = 1.27$	.62
SANS (median, IQR)	16.0 (0–25.0)	11.0 (0–23)	21.0 (0–20)	$U = .49$	.07
SOFAS (Mean ± SD)	52.8 (11.5)	53.2 (12.5)	53.6 (10.4)	$F = 2.1$	.88

Note: Sub-analysis was not completed on samples of 5 or less due to the potential for data to become identifiable and 3 participants reported gender other than male and female were excluded from statistical testing.

TABLE 2 Sexual behaviour outcomes

	Total cohort ($N = 69$)	Male ($n = 37$)	Female ($n = 29$)	Statistical test of difference	*p*-value
Sexual activity					
Ever been sexually active	54 (78.3%)	30 (81.1%)	21 (72.4%)	$X^2 = .70$, $df = 1$	40
	($n = 54$)	**($n = 30$)**	**($n = 21$)**		
Contraceptive use					
Condom not used at last sex act	35 (64.8%)	18 (60%)	14 (66.7%)	$X^2 = 3.74$, $df = 2$	.16
Inconsistent barrier contraception	39 (72.2%)	22 (73.3%)	14 (66.7%)	$X^2 = .07$, $df = 1$	.79
Did not have enough info about contraception	19 (35.2%)	10 (33.3%)	6 (28.6%)	$X^2 = .59$, $df = 2$	.74
Sexually transmitted infections (STIs)					
Never been tested	31 (57.4%)	19 (63.3%)	9 (42.9%)	$X^2 = 1.8$, $df = 1$	.18
Tested positive for STIs ($n = 23$)	7 (30.4%)	4 (36.3%)	3 (25.0%)	$X^2 = .01$, $df = 1$	.92
Chlamydia	5 (21.7%)				
Gonorrhoea	1 (4.3%)				
HIV	1 (4.3%)				
Where testing occurred ($n = 23$)					
General Practitioner (GP)/Family doctor	21 (91.3%)	10 (100%)	10 (83.3%)	$X^2 = 1.83$, $df = 1$	.18
Sexual health clinic	2 (8.7%)				
Pregnancy					
Ever been pregnant (self or partner)	9 (16.7%)	3 (10.0%)	5 (23.8%)	$X^2 = 1.46$, $df = 1$	.23
Unplanned pregnancy ($n = 9$)	6 (66.6%)	2 (66.7%)	4 (80.0%)	$X^2 = 1.95$, $df = 1$	.38
Had baby?					
Communication with previous sexual partner					
Did not talk about avoiding pregnancy	35 (64.8%)	19 (63.3%)	13 (61.9%)	$X^2 = 0.14$, $df = 1$	.93
Did not talk about condom use	29 (53.7%)	14 (46.7%)	12 (57.1%)	$X^2 = 1.95$, $df = 1$	.38
Did not talk about avoiding HIV	36 (66.7%)	20 (66.7%)	14 (33.3%)	$X^2 = .96$, $df = 1$	.62
Did not talk about avoiding other STIs	34 (63.0%)	19 (63.3%)	13 (66.7%)	$X^2 = 1.77$, $df = 1$	.42
Did not talk about sexual pleasure without intercourse	44 (81.5%)	21 (70.0%)	20 (95.2%)	$X^2 = 7.0$, $df = 1$	.03

Note: Sub-analysis was not completed on samples of 5 or less due to the potential for data to become identifiable.

3 months and 2 years and 2.9% ($n = 2$) in a relationship for less than 3 months. Males and females did not differ significantly on any demographic characteristics; see Table 1.

3.2 | Clinical characteristics

A total of 42% ($n = 28$) of the sample currently smoked tobacco, 40.5% ($n = 9$) drank alcohol, 21.6% ($n = 12$) used cannabis and 10.1% ($n = 5$) used amphetamines. In the total cohort, the mean BPRS score was 57.5 (SD ± 13.0), indicating a cohort that is markedly ill with a mean of 19.0 (SD ± 5.5) on the psychosis subscale and a median SANS score of 16.0 (IQR 0–25.0), indicating 'borderline' negative symptomology. The mean SOFAS score was 52.8 (SD ± 11.5), which indicates a serious impairment in the level of functioning. There were no significant differences between males and females in any other clinical measures.

3.3 | Sexual behaviours

Of the 69 young people, 78.3% ($n = 54$) had ever been sexually active. Of these, 64.8% ($n = 35$) did not use a condom during their most recent sexual intercourse, and 72.2% ($n = 39$) reported that they did not always use barrier contraception. Similarly, 35.2% ($n = 19$) felt that they did not have enough information about contraception. Of those who had been sexually active, 57.4% ($n = 31$) had never been tested for an STI. Of those tested, most commonly at their GPs, 30.4% ($n = 7$) were positive, most commonly for chlamydia (21.7%, $n = 5$). 16.7% ($n = 9$) of the sample had ever been pregnant (either self or partner), two-thirds of these pregnancies were unplanned.

Regarding communication with their most recent sexual partner, 53.7% ($n = 29$) did not discuss using condoms, 64.8% ($n = 35$) did not discuss avoiding pregnancy, 66.7% ($n = 36$) did not discuss avoiding HIV, 63.0% ($n = 34$) did not discuss avoiding other STIs, and 81.5% ($n = 44$) did not talk about sexual pleasure without intercourse. There

TABLE 3 Associations between symptomology/functioning and sexual behaviour

	Ever sexually active		Condom used at last sex act		Consistent barrier contraception used		Other risk indicator[a]	
	OR (95% CI)	*p*-value	OR (95% CI)	*p*-value	OR (95% CI)	*p*-value	OR (95% CI)	*p*-value
BPRS	0.87 (0.46, 1.66)	.67	0.97 (0.44, 2.13)	.93	1.00 (0.45, 2.22)	.99	0.75 (0.34, 1.66)	.48
SANS	1.31 (0.67, 2.54)	.43	1.55 (0.76, 3.18)	.24	0.92 (0.46, 1.85)	.82	0.85 (0.38, 1.87)	.68
SOFAS	2.51 (1.20, 5.23)	**.02**[a]	1.31 (0.69, 2.48)	.41	1.27 (0.64, 2.53)	.50	1.25 (0.61, 2.58)	.54
Current substance use	8.80 (1.71, 45.14)	**.01**[a]	0.69 (0.19, 2.51)	.58	0.68 (0.17, 2.65)	.58	1.09 (0.24, 4.92)	.92

Note: OR = Odds ratio of different sexual behaviours associated with one standard deviation (SD) increases for BPRS, SANS and SOFAS scores or reported current substance use estimated from multivariate logistic regression controlling for age and sex. Only participants reported ever sexually active ($n = 54$) were included in logistic regression models for condom used at last sex act, consistent barrier contraception used and other risk indictors. *p* value significant if >.05.

[a]Other risk indicator includes: had an unexpected pregnancy or tested positive for an STI.

were no significant differences between males and females in relation to sexual health, as demonstrated in Table 2.

3.4 | Association between symptomology and functioning with sexual behaviour

The associations between engaging in sexual behaviours and clinical symptomology/functioning are presented in Table 3. When controlling for age and gender, current substance use was associated with an about 8 folds increase in odds of being sexually active (OR = 8.80, 95% CI [1.71, 45.14]) compared to those who were not sexually active. Participants who reported better functioning were also more likely to be sexually active (OR = 2.51, 95% CI [1.20, 5.23] associated with one standard deviation increase SOFAS). There was no strong evidence that symptomology or functioning was associated with consistent barrier contraception use, condom use at last sex act, and had unexpected pregnancy or tested positive for STI.

4 | DISCUSSION

4.1 | Summary

In this cohort of young people with a first episode of psychosis, 78.3% reported ever being sexually active. Sexual high-risk behaviours were common, with inconsistent condom use being reported by over two thirds of the sample. More than a fifth of those sexually active had been pregnant, most of which had been unplanned. Some associations between sexual behaviours and symptomology/functioning were noted.

The rates of sexual high-risk behaviours are broadly similar to those found over a decade ago by Shield and colleagues (Shield et al., 2005) and Brown and colleagues (Brown et al., 2010), suggesting that while sexual health has not worsened in this population, there has been no improvement either. Given the development of services and treatments that have occurred over the years in mental health, it appears that this health behaviour remains neglected. This study found that young people were significantly more likely to have been sexually active if they were currently using substances. This highlights the common clinical presentation seen in early intervention in psychosis services whereby individuals present with multiple adverse health behaviours. Disaggregating these behaviours, particularly drug and alcohol use and sexual activity, presents a challenge to both clinicians and researchers attempting to develop interventions to address a particular health behaviour (Brown et al., 2021).

The finding that those who had ever been sexually active scored significantly higher on the SOFAS than those who had not may suggest that being sexually active requires a higher level of functioning than achieved by some young people with FEP. On the other hand, this finding could reflect the measure itself, given that the ability to engage in relationships is a functional element that is considered when a clinician is scoring a client on the SOFAS.

4.2 | Clinical implications

Less than two-thirds of this sample of young people experiencing a first episode of psychosis reported their sexuality as heterosexual. The proportion of individuals reporting their sexuality as 'other' in this study is higher than previous samples that have reported this; for example, Brown and colleagues (Brown et al., 2010) reported that 89.6% of their 2010 sample stated they were heterosexual with a similar rate of 84% reported by Shield et al. in 2005 (Shield et al., 2005). This finding perhaps represents the more recent western societal shift in acknowledging and accepting sexual diversity. It is a reminder that clinicians working with young people with FEP need to be aware of, and work effectively with, sexual diversity. Sexual health interventions delivered to this population should ensure they cover issues relevant across the sexuality spectrum.

Identifying those at risk of engaging in high-risk sexual behaviours, and consequentially those at risk of experiencing STIs or unwanted pregnancy, remains challenging to clinicians working with young people with FEP. Analysis of the associations between sexual behaviours and the symptomology/functioning of this cohort suggests a need to be functioning well enough to engage in relationships with

others, but after this threshold is met, there is less clarity of how psychiatric symptoms may impact sexual health. While this area of research (sexual health in mental illness) is still in its relative infancy, early intervention, that is, upon engagement with Early Intervention in Psychosis services, is likely a pivotal time to intervene to prevent and reduce high-risk sexual behaviours.

The development and feasibility testing of an intervention to promote sexual health in young people with mental illness is currently underway, known as PROSPEct (PROmoting Sexual health in young PEople). It is anticipated that the utilization of a participatory co-design approach will ensure that the intervention can best meet the needs of key stakeholders. The current finding that there were no significant differences between the sexual health behaviours of males and females reminds us that such an intervention should not specifically target one gender. The intervention development is complemented by the findings of a systematic review of sexual health promotion interventions for young people in at-risk populations (Brown et al., 2021). This review found that these interventions are often based on a theoretical model of health behaviour change such as the Information–Motivation–Behaviour skills model (John et al., 2017). This model suggests that whilst information is important for health behaviour change (i.e. knowledge), an individual's motivation to change is also critical (i.e. attitudes). The recent shift towards the importance of sexual well-being within the construct of sexual health was reflected in the more recent trials measuring elements such as communication skills. For this reason, the PROSPEct intervention will include a core focus on sexual well-being and communication skills in addition to more typical approaches towards changing attitudes and knowledge of high-risk sexual behaviours, HIV and STIs.

4.3 | Limitations

The results of this study need to be considered in light of the following limitations. The sample represents young people who volunteered to participate in a clinical trial focused on physical health and may not be comparable to the general population that uses the clinical services. Recruitment from one service may also mean these data are not representative of young people with FEP from a different location, both in Australia and globally. In addition, sexual behaviour data relied on self-report. Unfortunately, data relating to sexual dysfunction and sexual side-effects of medication were not collected. Therefore, it is not possible to establish what impact this may have had on an individual's functioning or sexual behaviour. Saying this, all participants had had minimal exposure to antipsychotics at time of data collection so sexual side-effects of medication are unlikely to be a substantial factor in the current cohort. Finally, using this methodology means that this study was not powered to detect differences in clinical presentations by sexual behaviour. Therefore, further analysis of larger cohorts is required so that the complex interactions between mental health presentations and sexual health can begin to be better understood.

5 | CONCLUSIONS

The results of this study of the sexual health of young people experiencing a first episode of psychosis suggest that rates of high-risk sexual behaviour remain an issue for this group. Targeted interventions that promotes sexual well-being and communication skills between partners should be promoted amongst this cohort to ensure that high-risk sexual health outcomes are mitigated against as early as possible. This area of sexual health in mental illness is still under-researched. More work is required to help clinicians and researchers understand who might be most at risk of engaging in high-risk sexual behaviours and experiencing physical health outcomes such as unwanted pregnancies, STIs, and blood-borne viruses (BBV).

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CONFLICT OF INTEREST

The authors report no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data supporting this study's findings are available from the corresponding author upon reasonable request.

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