

The Staying Deadly Survey

The Queensland Urban Indigenous
Mental Health Survey Report



The Queensland Urban Indigenous Mental Health Survey (QUIMHS), also known as the Staying Deadly Survey, was conducted by the QUIMHS Research Team based at the Queensland Centre for Mental Health Research (QCMHR) in collaboration with the Institute for Urban Indigenous Health.

We acknowledge the Aboriginal and Torres Strait Islander participants across Southeast Queensland whose stories informed this report, and share the values pertaining to Aboriginal and Torres Strait Islander data sovereignty in the collection, ownership and application of that data.

QCMHR is a partnership between Queensland Health and The University of Queensland. Hosted by West Moreton Health, QCMHR is funded to work state-wide in Queensland and contribute to the Australian and global research effort to improve mental health. The report was authored by members of the QUIMHS research team:

Dr Alize Ferrari

Stream Lead, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Tabinda Basit

Project Manager, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Dr Damian Santomauro

Deputy Lead and Senior Research Fellow, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

T'Keya Chambers

Survey Support Officer, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Jamileh Shadid

Research Officer, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Akiaja Lindstrom

Research Officer, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Dr Mathew Anderson

Survey Support Officer and Cultural Oversight, Institute for Urban Indigenous Health

Sally Arthur

Survey Support Officer, Epidemiology and Burden of Disease Team, Queensland Centre for Mental Health Research

Laura Corcoran

Research Communications Officer, Queensland Centre for Mental Health Research

The Staying Deadly – Queensland Urban Indigenous Mental Health Survey Report

Published by the Queensland Centre for Mental Health Research, July 2023

ISBN: 978-1-74272-411-9



This document is licensed under a CC BY-NC license. To view a copy of this license, visit:

<https://creativecommons.org/licenses/by-nc/4.0/>.

Suggested citation: Queensland Urban Indigenous Mental Health Survey (QUIMHS) Research Team. The Staying Deadly Survey – Queensland Urban Indigenous Mental Health Survey Report. Brisbane: Queensland Centre for Mental Health Research, 2023.

DOI: [10.14264/1c4e5ce](https://doi.org/10.14264/1c4e5ce)

The **Staying Deadly** Survey

**The Queensland Urban Indigenous
Mental Health Survey Report**

2023



Contents

Foreword	01	Results	20
Preface	02	Sample characteristics.....	20
Acknowledgment.....	03	Psychological distress	24
Project team.....	04	Impacts of the COVID-19 pandemic	47
About this report	05	Comparison to other surveys.....	53
Acronyms	06	Discussion	60
Executive summary	07	Significance of the research.....	60
Background.....	09	Considerations and limitations.....	64
The Queensland Urban Indigenous Mental Health Survey 10		Research applications and translation	66
The QUIMHS Pilot Study.....	10	Concluding statement.....	67
The QUIMHS Survey	12	References.....	68
Community consultation	14	Appendix A	71
Participant response	14		
Methods	15		
Survey sample	15		
Data collection	16		
Survey instrument	16		
Survey interviewers.....	18		
Data collection procedure	18		
Data analysis.....	18		

List of Tables and Figures

Tables

Table 1.1. Sample socio-demographic characteristics	20
Table 2.1. Levels of psychological distress within those experiencing a mental disorder or harmful substance use	24
Table 2.2. 12 month prevalence of mental disorders and harmful substance use.....	26
Table 2.3. Participants abstaining from substance use – 12-month prevalence.....	28
Table 2.4. Reasons for abstaining from substance use.....	29
Table 2.5. Smoking behaviour in past 12 months.....	30
Table 2.6. Health status by disorder.....	31
Table 2.7. Suicidality in the past 12 months.....	32
Table 2.8. Suicidality across the lifetime	32
Table 2.9. Sociodemographic correlates of mental disorders and harmful substance use in the last 12 months	33
Table 2.10. Comorbidity between mental disorders and harmful substance use in the past 12 months	36
Table 3.1. Service use in the past 12 months for the entire sample	36
Table 3.2. Service use in the past 12 months for those experiencing mental disorders and harmful substance use	37
Table 3.3. Service Use Preference.....	39
Table 3.4. Recognised need for services within total sample	41
Table 3.5. Recognised need for services within those experiencing mental disorders and harmful substance use.....	42
Table 3.6. Barriers to care for those with an unmet need for services	43
Table 3.7. Barriers to access at preferred service provider	45
Table 4.1. Associations between impacts of COVID-19 and mental disorders and harmful substance use.....	47
Table 4.2. Impact of COVID-19 on service utilisation within the entire sample	51
Table 5.1. Data collection processes across QUIMHS, NSMHW 2020-21 and NATSIHS 2018-19.....	53
Table 5.2. QUIMHS and NSMHW 2020-21 prevalence of mental disorders and harmful substance use in the past 12 months...	56
Table 5.3. Proportion (%) of cases reporting high/very high psychological distress in QUIMHS compared to NATSIHS 2018-19	58
Table 5.4. Sensitivity analysis showing raw and adjusted prevalence of mental disorders and harmful substance use in the past 12 months.....	59

Figures

Figure 1.1. Age and sex distribution of sample.....	22
Figure 1.2. Distribution of sample by location.....	23
Figure 2.1. Mental disorders and harmful substance use prevalence in the last 12 months, by age group	25
Figure 3.1. Types of health professionals and services accessed by those experiencing mental disorders and harmful substance use in the last 12 months, by sex.....	39

Foreword

The importance of good mental health on the health and wellbeing of our communities cannot be overstated; poor mental health impacts on education, employment and health outcomes, on whether our Mob can access safe and secure housing, or whether they end up in prison. We have known for some time in Southeast Queensland that many Aboriginal and Torres Strait Islander people face challenges relating to their mental health and wellbeing and that the burden of mental illness is actually greatest in urban areas. In Southeast Queensland, mental illness and substance use are the leading contributors to the burden of disease for Aboriginal and Torres Strait Islander people. We have also known from yarning with our people that they consider mental health care to be one of the largest service gaps and that whole of population or mainstream services and programs are not meeting our needs. But we have not been able to quantify the prevalence of mental illness and substance misuse in our communities because national mental health surveys have not previously measured prevalence for Aboriginal and Torres Strait Islander people specifically.

The Institute for Urban Indigenous Health is a network of Aboriginal Community Controlled Health Organisations in Southeast Queensland, which collectively provides health, aged care and social support services to nearly 40,000 Aboriginal and Torres Strait Islander people. For the last five years, we have been working with the Queensland Centre for Mental Health Research on the Queensland Urban Indigenous Mental Health Survey to quantify the levels of mental health challenges that face our people and the services they access and to understand the barriers they face in accessing services. The result is a comprehensive picture of the mental health needs of Aboriginal and Torres Strait Islander people in urban Southeast Queensland. The first population survey in the country to focus on the mental health of Aboriginal and Torres Strait Islander people, this study provides valuable information for policy makers, service planners and service providers in reforming mental health services to better meet the needs of our people.

On behalf of the Project Steering Committee, I congratulate the research team and surveyors on completion of this study during particularly difficult circumstances including the COVID-19 pandemic and local floods. They have taken a culturally safe and sensitive approach to honest and open yarns with Mob on particularly difficult subjects and have made a significant contribution to the evidence base for mental healthcare reform for Aboriginal and Torres Strait Islander people in Australia. Our people have spoken. The challenge for the Queensland health system is how we now respond.

Adrian Carson

Chief Executive Officer
Institute for Urban Indigenous Health

Preface

For our First Nations mob, our mental health is almost entirely tied to our social and emotional wellbeing; how we feel about ourselves, our place in the world; our communities, our cultures, our country, and our languages.

We have experienced pervasive challenges, complexities, and difficulties since colonisation, perpetuating ongoing trauma for our families, our extended kin, our communities, and our connections to culture, country, and each other.

The Queensland Urban Indigenous Mental Health Survey Report shines a light on the mental health and substance use burden impacting our mob living in southeast Queensland. Led by and with First Nations peoples, this important survey is about First Nations peoples, designed with First Nations peoples and critically for First Nations peoples, revealing the mental health and substance use prevalence among mob on our terms and in our words.

The results from the Queensland Urban Indigenous Mental Health Survey tell us what is needed to provide culturally supportive and safe pathways and models of care that will make a real difference with our mob. And we know this because it is what our mob has told us.

I respectfully thank everyone involved in this project for their invaluable work and support including both the Queensland Centre for Mental Health Research and the Institute for Urban Indigenous Health.

In particular, I respectfully thank all First Nations survey participants who were prepared to share their lived experience and have the courageous conversations we need to effect meaningful change. It is your contributions that make this survey so meaningful and deadly!

Haylene Grogan

Chief First Nations Health Officer
First Nations Health Office

Acknowledgment

The Queensland Urban Indigenous Mental Health Survey (QUIMHS) research team would like to acknowledge the Traditional Custodians of the land across the many nations in the Southeast Queensland region on which this work was undertaken. We recognise their continuing connection to land, waters, and community; and pay our respects to Elders past, present and emerging.

We would like to express a heartfelt thank you to the 406 Aboriginal and Torres Strait Islander participants who demonstrated vulnerability, courage, and resilience in sharing their stories. Their contribution has allowed us to take one step further in our shared endeavour to improve community wellbeing. We would also like to extend a special recognition and thank you to our seven Aboriginal and Torres Strait Islander interviewers who undertook their work with integrity, sensitivity and with a determination to improving the mental health outcomes of their community. This project was initiated in 2018, and encountered significant challenges related to the COVID-19 pandemic and the 2022 Brisbane floods during data collection. Thank you to the core research team for their unwavering commitment to this important work, especially during these challenging times.

We would like to thank all project stakeholders whose invaluable perspectives and practical support made this work possible. We thank the Institute for Urban Indigenous Health (IUIH) for their invaluable partnership and communication support, and Preston Campbell for his talent and energy in creating an incredible artwork specifically for the Staying Deadly campaign.

We also acknowledge the oversight and expertise provided to us by members of our Steering Committee. Their continued guidance ensured that we were able to successfully progress through to completion of this project.

We would like to thank West Moreton Hospital and Health Service which hosts the Queensland Centre for Mental Health Research for their support in facilitating this research. Finally, we would like to thank the Department of Health for the financial support provided for this project, with a special thanks to the Aboriginal and Torres Strait Islander Health Division who supported our research proposal from the very beginning.

Project team

QUIMHS Research Team

- Dr Alize Ferrari, *Lead Investigator*
- Tabinda Basit, *Project Manager*
- Dr Mathew Anderson*, *Survey Support Officer and Cultural oversight*
- Sally Arthur, *Survey Support Officer*
- T'Keya Chambers, *Survey Support Officer*
- Akiaya Lindstrom, *Research Officer*
- Jamileh Shadid, *Research Officer*
- Laura Corcoran, *Administrative Officer*
- Dr Damian Santomauro, *Statistician*
- Fred Wensing, *Survey Instrument Programmer*
- Jasmyn Adams*, *Project Manager (Jan-Jun 2019)*

QUIMHS Interviewers

- Tanika Marshall*, *Warluwarra mob*
- Felix Kerry*, *Kaureg/Argun and Meuram mob*
- Shelica Elara*, *Kamilaroi/Gamilaroi mob*
- Matthew Mazzoni*, *Nywaigi/Manbarra mob*
- Kristie Harris*, *Wiradjuri mob*
- Jada Duncan*, *Quandamooka mob*
- Elizabeth Lavelle*, *Wakka Wakka mob*

QUIMHS Steering Committee

- Adrian Carson* (Chair); CEO, *Institute for Urban Indigenous Health*
- Professor Harvey Whiteford; *Director, Queensland Centre for Mental Health Research*
- Dr Carmel Nelson; *Clinical Director, Institute for Urban Indigenous Health*
- Professor Cindy Shannon*; *Deputy Vice Chancellor (Indigenous, Diversity & Inclusion), Griffith University*
- A/Professor Ed Heffernan; *Stream Lead, Queensland Centre for Mental Health Research/Director of Queensland Forensic Mental Health Services, Queensland Health*
- Dr Fiona Charlson; *Stream Lead, Queensland Centre for Mental Health Research*
- A/Professor Meredith Harris; *School of Public Health, University of Queensland*
- Marianna Serghi; *Strategic Policy Adviser, Institute for Urban Indigenous Health*
- Kimina Andersen*; *Director Aboriginal and Torres Strait Islander Health, West Moreton Hospital and Health Service*
- Luke Shannon*; *Regional planning and data services, Institute for Urban Indigenous Health*
- Paul Durante*; *(former) General Manager, Moreton Aboriginal & Torres Strait Islander Community Health Service*

* Identify as Aboriginal and/or Torres Strait Islander

About this report

As authors of this report, we recognise and celebrate the diversity of Aboriginal and Torres Strait Islander cultures in Queensland and Australia. We respectfully use the term 'Indigenous Australians' to refer to both Aboriginal and Torres Strait Islander peoples for the purposes of this report, and to apply conventions commonly used in the research literature and government reports. The use of the term 'community' recognises it as a concept that relates to cultural groups, geographic groups or communities of interest.¹

The term 'mental disorders and harmful substance use' is used throughout this report and relates to the case definitions set for disorders included in the survey. It refers to clinically significant presentations of mental and harmful substance use* (i.e., problematic patterns and higher frequency of alcohol and illicit drug use). The QUIMHS research team recognises that this terminology is conceptually distinct from the holistic concept of social and emotional wellbeing for Indigenous Australians. We recognise that mental disorder diagnoses do not define an individual and do not capture their unique lived experiences or their resilience, vibrancy, and purpose. Similarly, the experiences of families, loved ones, and caregivers, which are vital to wellbeing, are also not captured. Additionally, we acknowledge that adverse mental health outcomes in Indigenous Australians are affected by ongoing historical, social, and socioeconomic factors that perpetuate disempowerment and inequity.

This study was undertaken within an urban Indigenous Australian population of Southeast Queensland (SEQ). In considering the generalisability of our results to the broader population of Indigenous Australians in SEQ, it is also important to recognise that the QUIMHS participants were not a random sample of the SEQ Indigenous population. Although our methods and findings pertain to the sampled population, we have also provided an analysis of how our survey findings differ to other surveys using randomised household samples of participants.

Finally, we would like to caution that some of the contents of this report may cause distress. If you need mental health crisis support, you can contact 13 YARN (13 92 76) to talk to a trained Aboriginal or Torres Strait Islander Crisis Supporter, or Lifeline (13 11 14), 24 hours a day, 7 days a week.

**To limit the length of the survey and response burden on participants, the survey's standardised diagnostic module was replaced with a shorter module containing items which produced only 'probable' diagnoses.*

Acronyms

95% CI	95% Confidence Interval
ABS	Australian Bureau of Statistics
ACCHS	Aboriginal Community Controlled Health Service
AMS	Aboriginal Medical Service
AUDIT	Alcohol Use Disorders Identification Test
DSM	Diagnostic and Statistical Manual of Mental Disorders
CAPI	Computer Assisted Personal Interview
CIDI	Composite International Diagnostic Interview
COVID-19	Coronavirus Disease 2019
GP	General Practitioner
HREC	Human Research Ethics Committee
ICD	International Classification of Diseases
IUIH	Institute for Urban Indigenous Health
K5/K10	Kessler Psychological Distress Scale
MCS-12	Mental Component Score 12

MD	Mental Disorder
NAIDOC	National Aborigines and Islanders Day Observance Committee
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NSMHW	National Survey of Mental Health and Wellbeing
PCS-12	Physical Component Score 12
PICF	Participant Information and Consent Form
QCMHR	Queensland Centre for Mental Health Research
QUIMHS	Queensland Urban Indigenous Mental Health Survey
SD	Standard Deviation
SDS	Severity of Dependence Scale
SF-12	Short-Form 12
SEQ	Southeast Queensland
UQ	The University of Queensland

Executive summary

Background

There have been concerted efforts to quantify the health gap for Indigenous Australians, implement effective interventions, and track health outcomes, however these cannot be fully realised without informative data on mental and substance use disorders and their treatment. The Queensland Urban Indigenous Mental Health Survey (QUIMHS) aimed to quantify the prevalence of mental disorders and harmful substance use within an adult sample of urban Indigenous Australians residing in southeast Queensland (SEQ), the proportion of individuals accessing services for their mental health, the type of services being accessed, and barriers to accessing care.

Methods

The project commenced in 2018 and was conducted in the following four stages: (1) survey establishment, (2) pilot study, (3) QUIMHS survey, (4) results dissemination. The instrumentation and methods were approved by the Townsville Health Services Human Research Ethics Committee and ratified by the University of Queensland (UQ) Human Research Ethics Committee for both the pilot study and QUIMHS survey. The QUIMHS Pilot Study was conducted between September and November of 2019 with 42 adult Indigenous Australian participants, who were members of participating Aboriginal Medical Services (AMSs). The purpose of the pilot was to test survey processes and instrumentation and inform the development of the QUIMHS survey.

The QUIMHS survey was conducted between February and October of 2022. Survey participants were 406 Indigenous Australians aged between 18 and 89 years. They were recruited using a mixture of household sampling (doorknocking) and snowball sampling (promotion of the survey within the community) across key locations in SEQ. Seven trained Indigenous Australian interviewers undertook structured face to face or video interviews with participants using a customised instrument which included the Composite International Diagnostic Interview (CIDI 3.0). Diagnoses were made according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Data analyses produced estimates of mental disorders and harmful substance use prevalence, disorder severity and comorbidity, suicidality, service utilisation, and COVID-19 impacts.

Findings

The prevalence of mental disorders and harmful substance use in the 12 months prior to the survey was 46.5%. Major depressive episodes and post-traumatic stress disorder were the most prevalent disorders with 24.6% and 19.9% of the entire sample with each disorder respectively. Approximately 16% of participants had more than 1 disorder in the 12 months prior to the survey. One in two participants (55.2%) had experienced suicidal thoughts and one in five participants (20.7%) had attempted suicide at some time in their life. Approximately 66% of participants experiencing a mental disorder or harmful substance use had accessed a health service in the 12 months prior to the survey. Participants preferred accessing Aboriginal Community Controlled Health Services (ACCHSs) over mainstream services for all types of health concerns. Of the 34% of participants with a disorder not accessing care, 46.8% recognised a need for that care (9.4% recognised a partially met need and 37.4% recognised an unmet need). The highest level of fully met need was for more conventional services such as medicines and tablets (35.5%) and counselling services and talking therapy (32.1%). The highest level of unmet need was for social interventions (20.1%). The most common reason for the partially met or unmet need was that the type of help participants asked for was not received.

QUIMHS data collection occurred during the COVID-19 pandemic while SEQ was experiencing elevated community transmission. Participants indicating that their mental health, physical health, relationships, or time spent doing extracurricular activities and learning had worsened due to the pandemic were twice more likely to have experienced a mental disorder and harmful substance use than those indicating that these factors had not changed. Those reporting “a great deal” of worry or distress about separation from their family or friends, cancellation, or restriction of significant life events, or being unable to participate in recreational activities because of COVID-19 were twice as likely to have a disorder in the last 12 months compared to those who reported no worry or distress for those items. Approximately one in five participants (22.7%) stated they needed more support for their mental health because of the pandemic. Flexible access options (e.g., telehealth or telephone services) were rated highest amongst factors that made accessibility to mental health and substance use services easier.

Implications

QUIMHS is the first epidemiological study conducted at this scale in Australia to report on mental disorders and harmful substance use prevalence and service use within the broader Indigenous Australian community. Findings have indicated high rates of mental disorders and harmful substance use faced by Indigenous Australians in SEQ, and important gaps and barriers within the mental health services they accessed. This project provides back to Indigenous Australians, reactions from members of their SEQ community about their mental health and experiences in accessing services. This project provides the opportunity for stakeholders involved in the identification, management, and prevention of mental and substance use disorders to respond to these findings and consider how they may be used to better inform the resourcing and planning for mental health services in SEQ.

Background

There is considerable evidence of inequalities in the relative health status of Indigenous Australians. The Australian Institute of Health and Welfare (AIHW) reports a substantial gap in life expectancy between Indigenous and non-Indigenous Australians (9.7 years for females; 11.5 years for males)². At the same time, in the general population, mental and substance use disorders are associated with a life expectancy gap of approximately 15.9 years for males and 12.0 years for females with these disorders³. The combination of these findings suggests that the gap in life expectancy for Indigenous Australians with mental and substance use disorders is likely to be considerably larger; however, the risk factors, distribution and impacts of these disorders in this population have not been clearly established. In 2018, mental and substance use disorders were a leading cause of disease burden, contributing to 43% of the non-fatal disease burden in Indigenous Queenslanders⁴. However, these estimates are derived from samples that are not representative of the general population (e.g., from hospital data), and use measures of psychological distress rather than diagnosable disorders or measures of self-reported mental and substance use disorders.

Furthermore, it has been difficult to monitor the care provided to Indigenous Queenslanders for their mental and substance use disorders. Treatment of mental and substance use disorders is provided by a range of primary and specialist health services within the public, private and not-for-profit community sectors, including by Aboriginal Community Controlled Health Services (ACCHSs). Variability in the information on services and interventions provided across these settings creates gaps and inconsistencies between collections. These inconsistencies make it difficult to monitor the care provided to particular groups, and impossible to track individual pathways across services. Information on service utilisation by Indigenous Australians is particularly limited, as information on Indigenous status is not always collected reliably and information collection systems within community sector services are not always well developed. Even where appropriate information is collected, detailed data on services provided is often not publicly released.

Data from previous health surveys of Indigenous Australians has not been sufficiently detailed or systematic to allow policy makers and administrators to identify and address gaps or deficiencies in the health service system, implement effective interventions or track mental health outcomes. Obtaining reliable and representative data on the prevalence of mental and substance use disorders and the treatment received would be a significant advance for policy makers, planners, and service providers in Queensland. Epidemiological surveys can quantify (1) coverage (i.e., the extent to which Indigenous Australians with diagnosed mental and substance use disorders receive treatment), (2) effective coverage (i.e., whether treatment comprises interventions described in evidence-based guidelines and other sources of best practice and delivered in for a duration sufficient to achieve a positive outcome), (3) unmet need (i.e., how many people wanted but did not receive treatment, and (4) barriers to care (i.e., the reasons that treatment was not received). Coupled with an understanding of the interventions that are effective for this population, this information would inform decisions about how services are best arranged and distributed, particularly in an environment of scarce resources, budgetary constraints and competing priorities.

The Queensland Urban Indigenous Mental Health Survey

In 2014, the Queensland Department of Health engaged the Queensland Centre for Mental Health Research (QCMHR) to scope the feasibility of conducting a survey to investigate the proportion of Indigenous Australian adults from SEQ receiving treatment for a mental or substance use disorder, the type and quality of mental health service being accessed, and implications for service reform. It was concluded that the survey would provide valuable information on those with a mental and substance use disorder in SEQ and their treatment. A proposal was delivered which outlined the value, feasibility and methodology for a survey to address these research questions in geographically defined populations of Indigenous Australians. Queensland Health approved the proposal and provided funding to develop and implement the Queensland Urban Indigenous Mental Health Survey (QUIMHS). The QUIMHS project was launched in 2018 and was conducted in the following four stages: (1) survey establishment (2018-19), (2) pilot study (2019), (3) QUIMHS survey (2022), (4) results dissemination (2022-23).

The QUIMHS Pilot Study

Aims and rationale

The QUIMHS pilot Study sought to assess both the suitability of the planned survey and adequacy of the instrumentation. Data collection was conducted between September and November of 2019 with 42 adult Indigenous Australian participants, who were members of participating Aboriginal Medical Services (AMSs). Ethics approval for the Pilot Study was provided by the Townsville Health Services Human Research Ethics Committee (HREC) (HREC/2019/QTHS/48829) and was ratified by The University of Queensland (UQ) HREC.

The pilot study tested the processes in place to administer the survey i.e., advertising materials, interviewer training and instructions, survey administration, participant and interviewer experience, support mechanisms for participants and interviewers (e.g., survey distress protocols), location and timing of interviews, IT and software processes in administering the instrument, and data storage. It also tested the appropriateness of the Composite International Diagnostic Interview (CIDI 3.0), a standardised instrument for identifying mental disorders within a survey. Although the CIDI 3.0 has yet to be fully validated in an Indigenous Australian population, it is used widely across low, middle and high income countries, Indigenous populations in high income countries (e.g., the Māori population in New Zealand) and within an Indigenous Queensland population in custody¹⁰. As such, use of the CIDI 3.0 in the QUIMHS survey best allowed for comparison of prevalence data with other populations, e.g., non-Indigenous Australians. In the QUIMHS pilot study, the clinical diagnoses output from the CIDI 3.0 were compared with diagnoses obtained from an Indigenous clinical psychologist's interview of the same participants. We considered the latter to be the gold-standard in identifying mental disorder diagnoses⁵. This comparison had never been done for a community residing Indigenous Australian population. It allowed the research team to investigate how Indigenous Australian social and cultural contexts influence how the CIDI 3.0 questions were interpreted and responded to.

Outcomes

The QUIMHS pilot study indicated that a cross-sectional population survey on the prevalence of mental and substance use disorders among urban Indigenous Australians in SEQ and their service use is possible and provided valuable insight on the feasibility, cultural suitability, and reliability of proposed data collection methods. This allowed the research team to make necessary adjustments to the QUIMHS survey. In summary, it was found that:

- (1) Survey participants responded positively to the survey, indicating it was important for the Indigenous Australian community, and did not report any major issues with the survey processes or instrument other than length and repetition.
- (2) Prioritising relationship-building between interviewers and participants, as well as interviewers and other interviewers, was key to facilitating culturally safe and positive experiences as well as survey completion.
- (3) The performance of the CIDI 3.0 in the QUIMHS pilot study in comparison with the clinical re-appraisals varied by module. Notably, the mania CIDI 3.0 module was found to be unsuitable for inclusion in the QUIMHS survey. When compared against results of the clinical re-appraisals it appeared that the CIDI 3.0 incorrectly diagnosed a large proportion of major depressive disorder cases as bipolar disorder.

Further details regarding the pilot study and its outcomes can be found in peer-reviewed publications^{6,7} and the QUIMHS Pilot Study Findings report⁸.

The QUIMHS Survey

The QUIMHS Survey was conducted between February and October 2022. Ethics approval for the QUIMHS Survey was provided by the Townsville Health Services HREC (HREC/2020/QTHS/61158) and was ratified by UQ HREC.

Research questions

The QUIMHS survey aimed to address the following research questions:

1. What is the proportion of Indigenous Australians in SEQ experiencing a mental disorder or harmful substance use and what are the risk factors for this disorder?
 - a. Produce 12-month prevalence estimates by disorder or harmful substance use,
 - b. Identify (1) cases of mental disorders and harmful substance use, (2) changes in health status due to mental disorders and harmful substance use (3) the potential risk factors associated with a diagnosis (including the impact of the COVID-19 pandemic), and (4) suicidal behaviour and its link to mental health status.
2. Of the Indigenous Australians in SEQ experiencing mental disorders and harmful substance use, what is the proportion of individuals being treated for the disorder or substance use?
3. What are they being treated for and to what extent are the services received considered evidence-based interventions (i.e., effective treatment coverage)?
 - a. Identify the interventions being received by the survey population?
 - b. Identify the interventions being received (e.g., face-to-face, telephone, or on the internet), and the professional was most involved in the delivery of the intervention.
4. What are the barriers to mental health care?
 - a. Identify where there was a recognised need for care among those who did and did not receive help from health professionals, and information on people who 'dropped out' before completing the recommended course of treatment.
 - b. Identify barriers to accessing care.

Case definitions

Case definitions for mental disorders and harmful substance use included in the QUIMHS survey are presented below. Mental disorders and harmful substance use were generally defined following criteria proposed by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-tr)⁹. DSM-IV-TR is an internationally recognised classificatory system of mental and substance use disorders which produce diagnoses according to a set of behavioural symptoms.

Mental and substance use disorders covered in QUIMHS

Included Disorders	Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (21) Definition
Major depressive disorder	A mood disorder characterised by one or more major depressive episodes i.e., at least 2 weeks of depressed mood or loss of interest accompanied by at least four additional symptoms of depression that include changes in appetite or weight, decreased energy and feelings of worthlessness.
Generalised anxiety disorder	An anxiety disorder characterised by persistent and excessive anxiety and worry, occurring more days than not for a period of at least 6 months. Feelings of anxiety and worry are accompanied by at least three additional symptoms from a list including restlessness, irritability and muscle tension.
Post-traumatic stress disorder	An anxiety disorder characterised by the re-experiencing of an extremely traumatic event accompanied by symptoms of increased arousal and by avoidance of stimuli associated with the trauma. Symptoms must be present for more than 1 month and the disturbance must cause clinically significant distress or impairment in social, occupational or other important areas of functioning.
Substance use*	Harmful substance use was captured through survey items on alcohol and illicit drug use and frequency. The following substances were included: • Alcohol • Cannabis • Amphetamines • MDMA • Cocaine • Hallucinogens • Inhalants • Heroin • Prescription drugs for non-medical purposes (e.g., OxyContin and benzodiazepines)

* Full clinical diagnoses of alcohol and illicit drug use disorders were not captured. Items included provide indicative or probable diagnoses.

Community consultation

Community consultation was undertaken at every stage of the QUIMHS survey and was ongoing until the end of results dissemination. The QUIMHS consultation process included consultations and briefing meetings with key project stakeholders, roundtable meetings with stakeholders, staff, pilot survey participants and community members, as well as mock interviews with community members. At each of these meetings attendees were briefed on survey methods, instrument, and accompanying documents. Every consultation also asked attendees to specifically reflect on the cultural suitability of the project processes. Feedback and input was operationalised and implemented into the survey processes wherever feasible. Any challenges to implementation were tabled and discussed at subsequent meetings. This consultative process was used to interpret the pilot survey findings and review and seek input on the methods and processes for the QUIMHS survey.

The QUIMHS Steering Committee provided guidance at each stage of the project (see Project Staff). The committee, comprised of both Indigenous and non-Indigenous representation, included experts in Indigenous health, epidemiology, and research. Members provided endorsement, advice, and guidance regarding process, sampling strategy and survey sites for both the pilot and QUIMHS survey.

Following this report, the study results will be made available to community in a variety of formats and for a range of audiences, including participating organisations, study participants who wanted to learn about the outcomes of the study and to stakeholders and the broader community via the QUIMHS website. A series of briefing meetings will be arranged as required with relevant stakeholders to further discuss the findings and their implications.

Participant response

The QUIMHS research team were acutely aware that speaking about mental health, suicide, and past experiences can be inherently challenging and the history of objectifying and disempowering research efforts with Indigenous Australians has left communities with a justified sense of distrust. Although the survey safety and risk measures for participants and interviewers alike were developed using input and feedback from our Indigenous stakeholders, steering committee, and pilot study, the QUIMHS research team also wanted to seek feedback directly from participants about the general process and their experience of the survey. A summary of participant feedback can be found in Appendix A.

Methods

Survey sample

Design

The QUIMHS survey design was cross-sectional, and participants included adult urban Indigenous Australians from key locations around SEQ. Seven trained Indigenous Interviewers conducted face-to-face/telesurvey interviews to collect data from individuals including information on their demographic circumstance, mental health risk factors, health service use and barriers they have faced in receiving appropriate care for mental and harmful substance use.

Settings

All eligible adults residing in SEQ were able to participate in the survey. They were selected through various sampling strategies involving social media, participation at community events, and household door knocking (discussed further in the next section). Key sites within SEQ were selected as the focus for community engagement and household doorknocking. These were selected based on postcodes where there was a higher concentration of Indigenous Australian residents. The site selection for both the pilot and the QUIMHS survey was chosen simultaneously; participants who took part in the pilot study were not eligible to take part in the QUIMHS survey.

Participant recruitment

Participants included Indigenous Australians, aged 18 years and over residing in SEQ. Individuals not identifying as Indigenous Australian, those under 18 years, those living outside SEQ, and/or those with severe persisting disabilities that would make informed consent and survey administration challenging were not eligible to participate in the survey.

The QUIMHS survey employed a mixed-method sampling strategy. This was made up of:

a) Household doorknocking—

Australian Bureau of Statistics (ABS) census data was used to extract geographic areas (mesh blocks) indicating locations in SEQ with a higher proportion of Indigenous Australian residents. From these, a random sample of mesh blocks were selected for participant recruitment. Information about the survey and upcoming doorknocking activities were mailed out to all residents in advance of door-knocking activities. During data-collection, interviewers went to each selected mesh block in pairs and doorknocked at each household to determine if anyone eligible for the survey was residing at that address, and if so, whether they would like more information about the survey.

b) *Snowball sampling*—

The QUIMHS survey was promoted through distribution of brochures and marketing materials at pre-selected organisations, health centres, community hubs and by survey interviewers' attendance at community events and programs. Locations with SEQ with higher proportion of Indigenous Australian residents were prioritised for these survey promotional activities. Additionally, a survey promotion campaign was rolled out via social media and radio targeting all Indigenous Australian residents within SEQ. From this, community members and survey participants were encouraged to invite other members of the community to participate in the survey. Although this was a non-probability sample, this approach served to make the survey highly visible to the target population and to allow the research team to achieve its recruitment goals within the time allocated for the project.

Data collection

Survey instrument

The QUIMHS survey collected data on 1) a range of demographic and risk factors; 2) the prevalence and severity of mental disorders and harmful substance use in the past 12 months; 3) suicidality; and (4) participants' service use and barriers to accessing care. Table 2 outlines the various components of the survey instrument.

Summary of modules included in the QUIMHS Survey instrument

Survey Module	Source	Description
Introduction	Developed by the QUIMHS team	General introduction of QUIMHS survey, the interviewer, survey processes and what is required from the participant and the completion of the participant and information consent form (PICF) which informs the participant about their rights during the survey and obtains informed consent from the participant.
Demographic and risk factors	Adapted from the Inside Out Study ¹⁰	Collects demographic and other relevant information for risk factor analysis (e.g., participant smoking behaviour, physical comorbidities, and cultural identity)
Psychological distress	Kessler Psychological Distress Scale (K-5) ¹¹	Measure of psychological distress adapted for use with Indigenous Australians
Symptom screening and diagnosis	Composite International Diagnostic Interview (CIDI 3.0) ¹²	Collects diagnostic information on depressive disorders, generalised anxiety disorder and post-traumatic stress disorder
Substance use screening	Developed by QCMHR team in reference to the CIDI 3.0 ¹² , the AUDIT ¹³ and the Severity of Dependence Scale ¹⁴	Collects information on the use, frequency, and severity of dependence on alcohol and other illicit substances

Survey Module	Source	Description
Suicidality	Adapted from the Inside Out Study ¹⁰ and the CIDI 3.0 ¹¹	Collects information on the occurrence, age of onset, and recency of suicide ideation, plans, and attempts.
Health status	Short-Form 12 (SF-12) ¹⁵	Collects information on respondent's health status across the following 8 domains: (1) limitations in physical activities because of health problems; (2) limitations in social activities because of physical or emotional problems; (3) limitations in usual role activities because of physical health problems; (4) bodily pain; (5) general mental health (psychological distress and well-being); (6) limitations in usual role activities because of emotional problems; (7) vitality (energy and fatigue); (8) general health perceptions
Service utilisation	Adapted from National Survey of Mental Health and Well-being (NSMHW) ¹⁶	Collects information on hospital admissions, health professional consultations, interventions received, met/unmet treatment needs, barriers to care, and treatment drop out
COVID-19 Impact module	Developed by the QUIMHS team	Items measuring the <i>degree</i> and the <i>kinds</i> of impact COVID-19 has had on participants
Conclusion	Developed by the QUIMHS team	This is the final module of the survey and contains options for the participant to exit the interview temporarily (to resume at a later time) or permanently. Additionally, it will contain prompts for the interviewer to: • Provide the participant with general feedback on the results of their survey and mental health support services available to them (in the form of a handout). • Present an optional future research PICF. This provides participant with information on future research and data-linkage options and provides opportunity for participant to provide informed consent for future contact and data-linkage. • Present the opportunity for participants to provide verbal and/or written feedback. • Thank the participant for their contribution and explain the plan for result dissemination.

Survey interviewers

The QUIMHS survey employed seven Indigenous Australian interviewers to undertake the QUIMHS survey. Our interviewers attended seven days of comprehensive training in participant recruitment, survey administration, data collection processes, research ethics, safety and distress protocols, and data management and confidentiality. Interviewers were responsible for (1) recruiting participants from key locations through community engagement activities and (2) administering a computer assisted survey to those willing to participate via both face-to-face and telesurvey modalities.

Data collection procedure

Eligible persons who expressed interest in taking part in the survey were contacted by a survey interviewer to arrange a face-to-face or telesurvey appointment to complete the interview. All interviews offered appropriate privacy, safety, and convenience for participants and interviewers. Interviewers followed all risk and safety protocols, including those relevant to home visits, COVID-19 safety guidelines, participant and interviewer distress protocols, and confidentiality. The interview was administered using Computer Assisted Personal Interview (CAPI) technology, specialised software to create a custom interface, and Blaise software. The interviewer read out all questions and input participants' answers into the interface. Interview duration ranged from 30 minutes to four hours, depending on participants' answers, with most interviews being completed in under two hours. The use of breaks was encouraged and was used frequently to make the experience as comfortable as possible. Participants also had the option to pause the survey and return to complete it at a later date. Survey data was exported using specialised software to a secure research data-management system daily.

Data analysis

Quantitative data analysis

Data analyses were conducted in R (version 4.2.2),¹⁷ using the survey package. All survey data were weighted by location (Local Government Areas), age, and sex distribution using the distribution of Indigenous Australians within each respective age-sex-location group reported in the 2021 Australian census¹⁸. All survey data outputs were generated with 95% confidence intervals (CI) and p-values were calculated where relevant.

Established diagnostics algorithms were used to identify cases meeting DSM-IV-TR criteria for each mental disorder and harmful substance use. The Short Form 12 (SF-12) scale¹⁵ assessed changes in health status across mental health and physical health domains. Two summary scores were derived from participants' SF-12 responses – a mental component score (MCS-12) and a physical component score (PCS-12). Scores ranged from 0 to 100, with higher scores corresponding to better physical and mental health functioning. Using this process, health status was quantified for each participant then averaged across each mental disorder and harmful substance use. The average distribution considered both the impact of the disorder(s) in question and the impact of all comorbid disorders experienced by participants.

A series of logistic regression analyses and t-tests were used to quantify the association between socio-demographic correlates, other social, cultural, and COVID-19 impact variables, and the prevalence of mental disorders and harmful substance use. In cases where variables had multiple response options (multiple levels), a reference point was chosen within the analysis for comparison against other response options. Typically, the most normative or common response option was chosen as the reference to compare other response options against. These analyses were conducted across both sexes and all age groups due to limited sample size and statistical power to detect a statistically significant effect across age and sex.

Qualitative data analysis

Qualitative items were asked of participants at several points throughout the survey to gain richer and more nuanced information about their mental health and service use. These were open text items to which participants could respond freely. Their responses were recorded verbatim. The qualitative responses were extracted and coded by the research team into themes. In this report, a summary of themes of relevant items are provided alongside some exemplar comments to provide context to the corresponding quantitative data.

Further details regarding the QUIMHS survey methods can be found in the study protocol and documentation (available on request).

Results

Sample characteristics

Socio-demographic count

The total sample of the QUIMHS survey (N = 406) consisted of more females (72.2%) compared to males (27.3%), with less than 1% of the sample accounting for gender diverse participants or those who prefer not to disclose their gender. Most of the sample identified as Aboriginal (92.4%). Some participants identified as Aboriginal and Torres Strait Islander (5.2%) and 2.5% identified as Torres Strait Islander. Table 1.1 shows the total sample counts (with associated unweighted percentages) by different socio-demographic characteristics.

Table 1.1. Sample socio-demographic characteristics

Variable	Variable levels	% of total sample	Sample count ^a
Age (years)	18 to 29	23.6	96
	30 to 39	22.4	91
	40 to 49	21.2	86
	50 to 59	19.2	78
	60 +	13.5	55
Sex ^b	Female	72.0	293
	Male	27.3	111
Indigenous status	Aboriginal	92.4	375
	Aboriginal and Torres Strait Islander	5.2	21
	Torres Strait Islander	2.5	10
Marital status	Divorced/Separated/Widowed	7.1	29
	Married/De facto/Partnered	55.7	226
	Single/Other	37.2	151

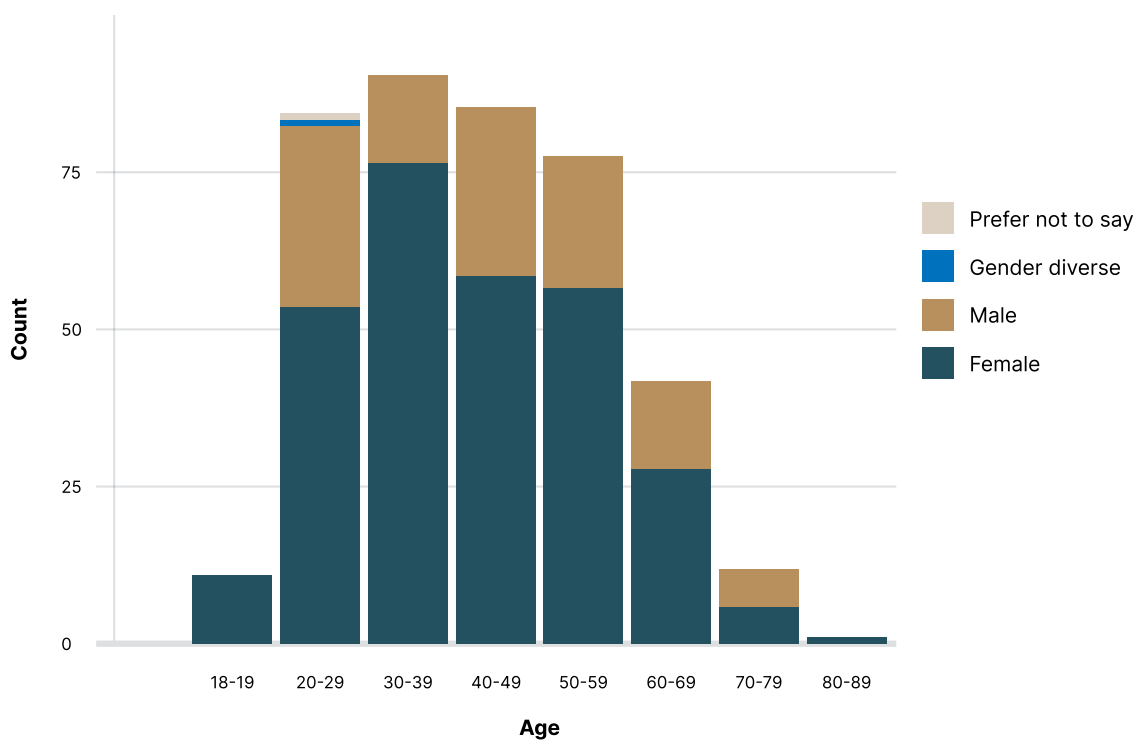
Variable	Variable levels	% of total sample	Sample count ^a
Highest level of schooling ^b	Finished aged 12 to 15 years	9.6	39
	Finished aged 16 to 17 years	5.2	21
	Finished school	84.2	342
Highest level of tertiary education ^b	Bachelor / Postgraduate degree	18.7	76
	Certificate/Diploma/Associate degree	46.6	189
	No qualifications / Prefer not to say	34.7	141
Employment status ^b	Paid employment	63.1	256
	Government payments	22.9	93
	Unemployed	10.8	44
	Studying	4.2	17
Living situation	Homeowner	29.1	118
	Renting	57.9	235
	Staying with friend or family	10.8	44
	Sleeping rough/Homeless/Other	2.2	9

^a Unweighted estimates provided.

^b Due to very small cell counts, some response options to these variables have been suppressed.

The average age of participants in the sample was 42.1 years (Standard deviation (SD) = 14.1). Across sexes, the average age of males was 44.0 (SD = 14.8) and females was 41.5 (SD = 13.7). Those aged under 20 years and over 79 years consisted of females only, with males in the sample aged between 20 and 79 years. Figure 1.1 shows the age and sex distribution of the sample.

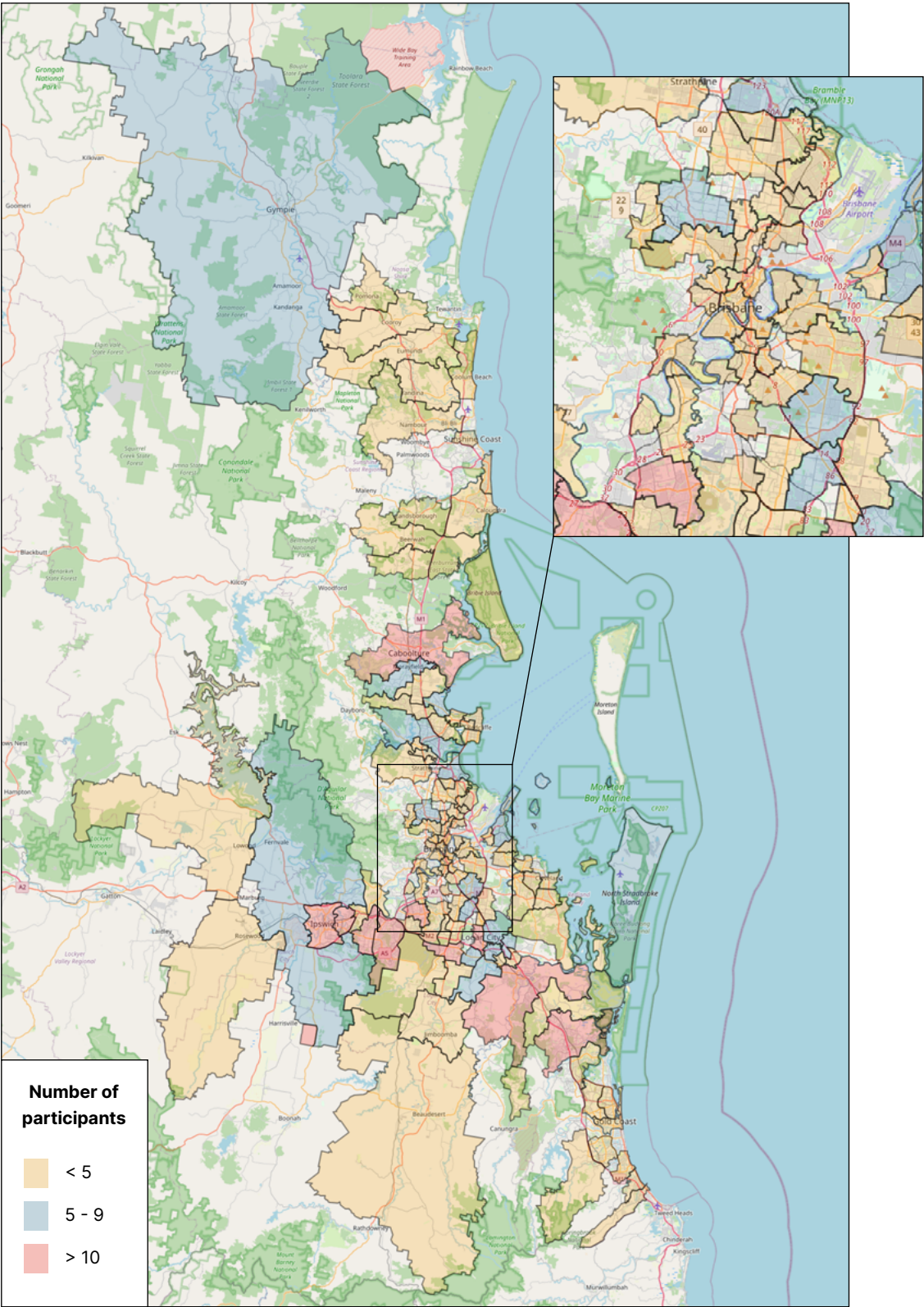
Figure 1.1. Age and sex distribution of sample



Sample location

Figure 1.2 illustrates the distribution of participants by location. Areas with the most participants were Caboolture, Ipswich, Logan, Redlands and Brisbane council areas, which corresponded with the areas in which targeted promotion and doorknocking activities were held.

Figure 1.2. Distribution of sample by location



Psychological distress

Prevalence of psychological distress

The QUIMHS instrument also contained the Kessler-5 (K5) as a broad measure of psychological distress. The K5 was separate to the diagnostic modules within the survey which produced mental disorders and harmful substance use prevalence in the past 12 months. Instead, it measured levels of overall psychological distress or negative emotional states experienced in the four weeks prior to interview. Overall, we found that scores on the K5 were higher (i.e., indicating higher psychological distress) for participants experiencing a mental disorder or harmful substance use compared to those without a disorder particularly within those scoring high or very high psychological distress. Approximately 45.8% (40.7 – 51.0%) of the sample reported high/very high levels of psychological distress on the K5. Of those people, 64.9% (57.2 – 71.9%) went on to meet diagnostic criteria for a mental disorder or harmful substance use in the past 12 months (see Table 2.1). Of the remaining 54.2% (49.0 – 59.3%) reporting low/moderate psychological distress, 29.3% (23.2 – 36.1%) went on to meet diagnostic criteria for a mental disorder or harmful substance use in the past 12 months.

Table 2.1. Levels of psychological distress within those experiencing a mental disorder or harmful substance use

Disorder Group	Kessler-5 score ^a			
	Low/Moderate		High/Very High	
	Cases	Prevalence % (95% CI) ^b	Cases	Prevalence % (95% CI) ^b
Mental disorders	47	22 (16.7 – 28.4)	111	61.8 (54.1 – 69.1)
Harmful substance use	20	9.4 (6.0 – 14.4)	18	11.4 (7.2 – 17.6)
Mental disorders and harmful substance use	62	29.3 (23.2 – 36.1)	116	64.9 (57.2 – 71.9)

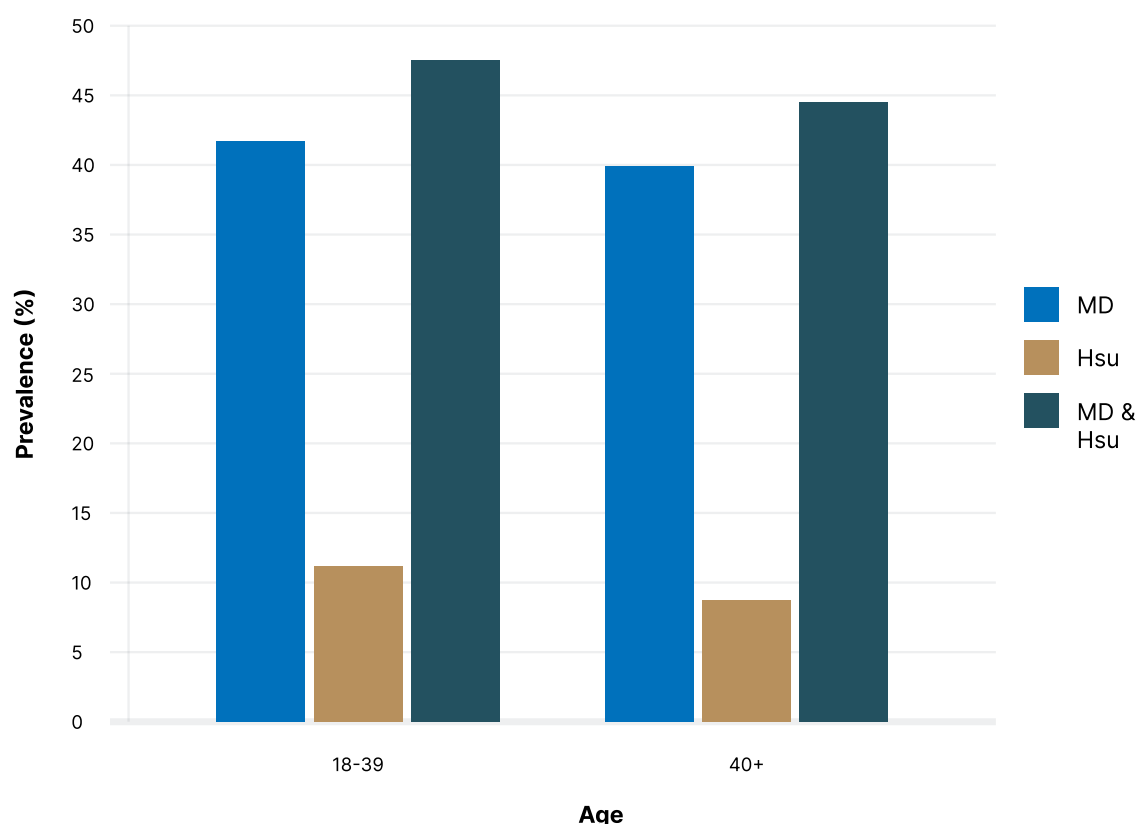
^a Total score based on the sum of K5 item 01 through 05 (range: 5-25), where low/moderate = 5-11, and high/very high = 12-25.

^b 95% CI: 95% confidence interval.

Prevalence of mental disorders and harmful substance use

Overall, 45.6% (40.5 – 50.8%) of participants experienced a mental disorder or harmful substance use in the 12 months prior to the survey, equivalent to almost one in every two participants. Most of these participants had experienced a mental disorder (40.2%, 35.2 – 45.4%) as opposed to harmful substance use (10.3%, 7.5 – 14.0%). We observed higher prevalence amongst females compared to males across all disorder types except for other illicit drug use disorders, however this effect was not statistically significant. Figure 2.1 presents the prevalence of mental disorders and harmful substance use in the last 12 months grouped into those 18 to 39 years old and 40 years old and over, respectively. Disorder prevalence was similar across both these age groups with close to half participants across both age groups experiencing a disorder in the 12 months prior to the survey.

Figure 2.1. Mental disorders and harmful substance use prevalence in the last 12 months, by age group



Note. MD: any mental disorder, Hsu: harmful substance use, MD & Hsu: any mental disorder or harmful substance use.

Of specific mental disorders and harmful substance use in the past 12 months (see Table 2.2), a major depressive episode was the most common disorder experienced, with a quarter of participants experiencing depression in the past 12 months (24.6%, 20.4 – 29.3%). This was closely followed by post-traumatic stress disorder, with approximately 20% (19.9%, 16.1 – 24.5%) of participants experiencing a post-traumatic stress disorder in the last 12 months. We detected slightly more females with each mental disorder compared to males, however this sex-difference was not statistically significant.

Within the substances investigated in the survey, alcohol use was the most common. Alcohol use was measured using two different tools; hazardous use was measured using the Alcohol Use Disorders Identification Test (AUDIT-C)¹³ and probable dependence was measured using the Severity of Dependence Scale (SDS)¹⁴. The survey identified 42.7% (37.6 – 48.0%) of participants as hazardous drinkers and 6.3% (4.2 – 9.4%) of participants as having probable alcohol dependence in the last 12 months. Hazardous use was significantly more common amongst males (57.6%, 47.3 – 67.3%) compared to females (36.9%, 31.1 – 43.1%). However, we saw the inverse sex pattern for probable alcohol dependence where there were slightly more females (7.0%, 4.5 – 10.8%) with probable alcohol dependence compared to males (2.7%, 1.0 – 7.4%), however this difference was not statistically significant.

Table 2.2. 12 month prevalence of mental disorders and harmful substance use

Disorder	Sex	Prevalence (%)	95% CI ^b
Any mental or harmful substance use	Both	45.6	(40.5 – 50.8)
	Female	48.2	(42.2 – 54.3)
	Male	37.7	(28.5 – 48.0)
Any mental disorder	Both	40.2	(35.2 – 45.4)
	Female	42.4	(36.5 – 48.5)
	Male	35.1	(26.1 – 45.4)
Major depressive episode	Both	24.6	(20.4 – 29.3)
	Female	25.8	(20.8 – 31.4)
	Male	22.0	(14.8 – 31.3)
Generalised anxiety disorder	Both	8.1	(5.7 – 11.4)
	Female	8.7	(5.8 – 12.8)
	Male	6.6	(3.0 – 13.6)
Post-traumatic stress disorder	Both	19.9	(16.1 – 24.5)
	Female	21.3	(16.7 – 26.8)
	Male	16.6	(10.3 – 25.7)
Any harmful substance use	Both	10.3	(7.5 – 14.0)
	Female	10.5	(7.3 – 14.9)
	Male	8.2	(8.2 – 16.4)
Hazardous alcohol use	Both	42.7	(37.6 – 48.0)
	Female	36.9	(31.1 – 43.1)
	Male	57.6	(47.3 – 67.3)
Probable alcohol dependence	Both	6.3	(4.2 – 9.4)
	Female	7.0	(4.5 – 10.8)
	Male	2.7	(1.0 – 7.4)

Disorder	Sex	Prevalence (%)	95% CI ^b
Weekly cannabis use	Both	14.5	(11.0 – 18.8)
	Female	11.6	(8.1 – 16.3)
	Male	20.0	(12.5 – 30.4)
Probable cannabis dependence	Both	3.5	(2.0 – 6.2)
	Female	3.7	(2.0 – 7.0)
	Male	2.9	(0.7 – 11)
Weekly illicit drug use (other) ^a	Both	3.1	(1.6 – 5.7)
	Female	1.7	(0.6 – 4.6)
	Male	5.5	(2.2 – 13.0)
Probable illicit drug use dependence (other) ^a	Both	2.4	(1.2 – 4.7)
	Female	1.5	(0.5 – 3.9)
	Male	5.1	(1.9 – 13.0)

Note. Mental disorder diagnosis based on CIDI 3.0. Harmful substance use based on AUDIT-C and SDS.

^a The illicit drug (other) category comprised of amphetamines, MDMA, cocaine, hallucinogens, inhalants, heroin, and prescription drugs.

^b 95% CI: 95% confidence interval.

Cannabis use was the second most common substance used with 14.5% (11.0 – 18.8%) of the sample using cannabis at least weekly in the last 12 months and 3.5% (2.0 – 6.2%) meeting criteria for probable cannabis dependence (see Table 2.2). As was the case for alcohol use, weekly cannabis use was more common amongst males relative to females however the inverse sex pattern was observed for probable cannabis dependence. These sex differences were not statistically significant.

The other illicit drugs captured in our survey were amphetamines, MDMA, cocaine, hallucinogens, inhalants, heroin, and prescription drugs. Due to small sample sizes, prevalence estimates for these drug types were combined. Overall, we estimated that 3.1% (1.6 – 5.7%) of participants used other illicit drugs at least weekly in the last 12 months, and 2.4% (1.2 – 4.7%) met criteria for probable dependence on other illicit drugs. There were more male cases compared to female cases across both weekly use and probable dependence for these other illicit drugs, however this sex difference was not statistically significant.

Abstainers

Table 2.3. Participants abstaining from substance use – 12-month prevalence

Substance	Sex	Prevalence (%)	95% CI ^b	Cases	Sample
Alcohol use	Both	22.3	(18.3 – 26.9)	99	401
	Female	23.4	(18.8 – 28.9)	75	289
	Male	19.7	(12.8 – 29.1)	24	110
Cannabis use	Both	75.1	(70.1 – 79.6)	321	401
	Female	78.4	(72.6 – 83.2)	236	289
	Male	68.2	(57.4 – 77.4)	84	110
Other illicit drug use ^a	Both	90.3	(86.5 – 93.2)	370	401
	Female	93.3	(89.2 – 95.9)	273	289
	Male	83.2	(73.3 – 90.0)	96	110

^a The illicit drug (other) category comprised of amphetamines, MDMA, cocaine, hallucinogens, inhalants, heroin, and prescription drugs.

^b 95% CI: 95% confidence interval.

Over a fifth of the study participants (22.3%, 18.3 – 26.9%) abstained from alcohol completely, over three quarters abstained from cannabis use (75.1%, 70.1 – 79.6%), and nine in ten (90.3%, 86.4 – 93.2%) abstained from other illicit drugs (see Table 2.3). Across all substances, females had slightly higher rates of abstaining than males, although this pattern did not reach statistical significance. Participants that reported abstaining from a substance were asked for their reasons for not using in an open text item. The overarching themes are summarised in Table 2.4. The most common reported reason for abstinence from all substances was having no desire or interest in using that substance, with up to half of all participants reported no desire to use. For alcohol use, over a third of participants reported health related concerns associated with use as their reason for abstinence.

Table 2.4. Reasons for abstaining from substance use

Theme	Alcohol (N = 101)		Cannabis (N = 206)		Other illicit drugs (N = 238)	
	Frequency (n, %)	Narratives	Frequency (n, %)	Narratives	Frequency (n, %)	Narratives
Adverse impact on health and wellbeing and adverse experiences	34, 34.24%	"Not good for my health and wellbeing." "Heart and kidney problems. I have to take care of myself now...."	48, 23.3%	"Asthma issues. Never wanted to make it worse by smoking something." "It makes my head go all cloudy."	41, 17.22%	"I want to be in control of my body, mind and spirit." "I'm under medication and don't need more."
Observed impact on health and wellbeing of others	17, 16.83%	"Seen too many people die from it." "My father was an alcoholic."	16, 7.76%	"Watching other family members do it made me not do it." "I have seen what drugs can do to people."	43, 18.06%	"...Lost [my] brother to drugs." "I've grown up around it and watched everyone around me do it, I don't see the point of frying your own brain."
No desire to use (including responses linked to morals and beliefs)	41, 40.59%	"It's not for me, it's disgusting." "Because I don't think you need to have alcohol to have fun."	108, 52.42%	"Never seen the need to use it." "It's not really my thing."	126, 52.94%	"Never wanted to use it or needed it." "It doesn't appeal to me."
Other reasons for abstaining	9, 8.91%	"...For [my] sporting career." "Well, I can't afford it with all the bills I have."	34, 16.5%	"...I don't want to lose my job." "It's hard to find."	28, 11.76%	"It's illegal for a reason." "I became a mum young so knew the responsibility I have."

Smoking behaviour

Table 2.5 summarises smoking behaviours of participants within the last 12 months. Table 2.5 presents the proportion of participants smoking cigarettes or vaping e-cigarettes weekly. It also presents those smoking or vaping daily, as a proportion of those smoking/vaping weekly. Just over a quarter of the sample (26.4%, 22.1 – 31.3) smoked cigarettes weekly and 14.7% (11.4 – 18.8%) smoked cigarettes daily. On average, daily smokers smoked 11.7 (9.1 – 13.4) cigarettes per day. Just over a tenth of the sample (11.9%, 8.8 – 15.9%) vaped e-cigarettes weekly, and close to half of those participants vaped e-cigarettes daily (5.1%, 3.2 – 8.1%). Current daily e-smokers vaped an average of 15.6 (11.2 – 20.0) times per day.

Table 2.5. Smoking behaviour in past 12 months

Smoking behaviour	Sex	Did not smoke/ vape weekly % (95% CI) ^a	Smoked/vaped weekly % (95% CI) ^a	Smoked/vaped daily ^b % (95% CI) ^a
Cigarettes	Both	73.6 (68.7 – 77.9)	26.4 (22.1 – 31.3)	14.7 (11.4 – 18.8)
	Female	73.2 (67.4 – 78.2)	26.8 (21.8 – 32.6)	14.6 (10.9 – 19.3)
	Male	75.5 (65.2 – 83.5)	24.5 (16.5 – 34.8)	13.9 (8.0 – 22.9)
e-cigarettes	Both	88.1 (84.1 – 91.2)	11.9 (8.8 – 15.9)	5.1 (3.2 – 8.1)
	Female	90.5 (86.0 – 93.6)	9.5 (6.4 – 14.0)	2.9 (1.4 – 5.7)
	Male	80.9 (70.7 – 88.1)	19.1 (11.9 – 29.3)	11.9 (6.4 – 21.0)

^a 95% CI: 95% confidence interval.

^b Out of those smoking/vaping weekly.

Health status

The Short Form 12 (SF-12) scale¹⁵ was used to measure how respondents rated their health status across mental health and physical health domains. The SF-12 scale produces two summary scores – a mental component score (MCS-12) and a physical component score (PCS-12). Scores range from 0 to 100, with higher scores corresponding to better physical and mental health functioning. Table 2.6 presents the average SF-12 scores for participants experiencing a mental disorder or harmful substance use. Participants with no diagnosis scored a mean of 50.5 (49.3 – 51.7) on the MCS-12 and 50.2 (48.9 – 51.4) on the PCS-12 respectively. By comparison, participants experiencing mental disorders and harmful substance use all scored under 50 across both component scores, except for participants with probable alcohol dependence on the PCS-12. Participants with a major depressive episode and generalised anxiety disorder had the lowest mean scores across both the MSC-12 and the PCS-12, as well as participants with an illicit drug use disorder on the PCS-12.

Table 2.6. Health status by disorder

Disorder	MCS-12 average score Mean (95% CI) ^b	PCS-12 average score Mean (95% CI) ^b
No disorder	50.5 (49.3 – 51.7)	50.2 (48.9 – 51.4)
Any mental disorder and harmful substance use	42.5 (40.7 – 44.3)	47.2 (45.5 – 48.8)
Major depressive episode	39.5 (36.9 – 42.1)	45.3 (42.9 – 47.7)
Generalised anxiety disorder	39.4 (34.7 – 44)	44.6 (40.8 – 48.4)
Post-traumatic stress disorder	43.1 (40.5 – 45.7)	48.2 (45.9 – 50.5)
Probable alcohol dependence	44 (39.3 – 48.8)	51.9 (48.6 – 55.1)
Probable cannabis dependence	45.3 (41.4 – 49.3)	50 (45.9 – 54.1)
Probable illicit drug use dependence (other) ^a	42.7 (32.7 – 52.7)	45.2 (41.5 – 48.8)

^a The illicit drug (other) category comprised of amphetamines, MDMA, cocaine, hallucinogens, inhalants, heroin, and prescription drugs.

^b 95% CI: 95% confidence interval; MCS-12: Mental component score on the Short Form 12, PCS-12: Physical component score on the short form 12.

Suicidality

QUIMHS examined the rates of suicidal thoughts, plans, and attempts amongst participants in the last 12 months and across their lifetime. These findings are summarised in Tables 2.7 and 2.8. In the last 12 months, 5.4% (3.4 – 8.4%) of participants had experienced suicidal thoughts, 1.3% (0.5 – 3.1%) of participants had made suicidal plans, and 2.2% (1.1 – 4.4%) of participants had attempted suicide. All participants reporting to have made plans or attempting suicide in the last 12 months also met criteria for mental disorders and harmful substance use.

In their lifetime, one in two participants (55.2%, 50.0 – 60.4%) had experienced suicidal thoughts, one in four participants (26.3%, 22.0 – 31.2%) had made a suicidal plan, and one in five participants (20.7%, 16.8 – 25.3%) had attempted suicide. Additionally, 57.5% (52.2 – 62.6%) of participants reported that they had lost a close friend or family member to suicide. Of these participants, the average number of lost friends or relatives to suicide was 3.2 (2.8 – 3.7). There were no statistically significant sex differences detected.

Table 2.7. Suicidality in the past 12 months

Outcome	Sex	Prevalence (%)	95% CI ^a
Thoughts	Both	5.4	(3.4 – 8.4)
	Female	4.6	(2.5 – 8.1)
	Male	8.1	(3.9 – 16.0)
Plans	Both	1.3	(0.5 – 3.1)
	Female	1.7	(0.7 – 4.1)
	Male	0	(0 – 0)
Attempts	Both	2.2	(1.1 – 4.4)
	Female	2.2	(1.0 – 4.9)
	Male	2.2	(0.5 – 8.8)

^a 95% CI: 95% confidence interval.

Table 2.8. Suicidality across the lifetime

Outcome	Sex	Prevalence (%)	95% CI ^a
Thoughts	Both	55.2	(50.0 – 60.4)
	Female	54.3	(48.2 – 60.3)
	Male	58.1	(47.5 – 67.8)
Plans	Both	26.3	(22.0 – 31.2)
	Female	25.3	(20.3 – 30.9)
	Male	30.4	(21.7 – 40.8)
Attempts	Both	20.7	(16.8 – 25.3)
	Female	20.7	(16.1 – 26.0)
	Male	21.6	(14.2 – 31.4)
Close friend/family death	Both	57.5	(52.2 – 62.6)
	Female	56.6	(50.5 – 62.6)
	Male	60.2	(49.7 – 69.9)

^a 95% CI: 95% confidence interval

The distribution of suicidal thoughts, plans, and attempts were similar across males and females for both the past 12 month and lifetime findings. The sample size of participants who had suicidal thoughts, plans and/or attempts were too small to conduct any further analysis on specific disorders and their relationship to suicidality.

Correlates of mental disorders and harmful substance use

A series of logistic regression analyses were conducted to investigate associations between selected socio-demographic variables and the prevalence of mental disorders and harmful substance use in the last 12 months. This analysis produced odds ratios (OR), which can be interpreted as the likelihood of having a mental disorder or harmful substance use across various levels of a given socio-demographic variable.

The results of this analysis are presented in Table 2.9. Participants who reported sleeping rough or being homeless as their current living situation were almost six times more likely to experience mental disorders and harmful substance use in the last 12 months compared to homeowners. Additionally, participants who reported having some form of financial stress in the last 12 months were two times as likely to experience mental disorders and harmful substance use in the last 12 months compared to those who did not report the same form of financial stress. We detected no statistically significant difference in disorder prevalence across age, marital status, level of school completion, highest tertiary education, employment status, or history of incarceration.

Table 2.9. Sociodemographic correlates of mental disorders and harmful substance use in the last 12 months

Socio-demographic variable	Odds Ratio	95% CI*	Sample
Age (years)			
18-39 (reference group)			187
40+	0.9	(0.6 – 1.3)	219
Marital status			
Married/De facto/Partnered (reference group)			226
Divorced/Separated/Widowed	1.1	(0.5 – 2.7)	29
Single/Other ^a	1.5	(1.0 – 2.4)	151
Highest year of school completed			
Year 12/equivalent (reference group)			342
Did not complete school ^b	1.2	(0.7 – 2.1)	64

Socio-demographic variable	Odds Ratio	95% CI*	Sample
Highest tertiary qualification			
Bachelor/Post-graduate degree (reference group)			76
Certificate/Diploma/Associate degree	0.8	(0.4 – 1.3)	189
No qualifications/Prefer not to say	0.6	(0.3 – 1.0)	141
Employment status			
Paid employment (reference group)			256
Certificate/Diploma/Associate degree	1.5	(0.9 – 2.5)	87
No qualifications/Prefer not to say	1.3	(0.7 – 2.4)	63
Living situation			
Homeowner (reference group)			118
Renting	1.1	(0.7 – 1.8)	235
Staying with friends/family	0.9	(0.4 – 1.9)	44
Sleeping rough/Homeless/Other	6.0*	(1.2 – 31.1)	9
Financial stress (in last 12 months)			
Able to pay bills (reference group)			309
Unable to pay bills	2.0*	(1.2 – 3.3)	97
Able to afford groceries (reference group)			328
Unable to afford groceries	2.0*	(1.2 – 3.4)	78
Did not seek assistance from welfare (reference group)			297
Sought assistance from welfare	2.1*	(1.3 – 3.3)	109
Did not seek financial health from friends/family (reference group)			266
Sought financial help from friends/family	2.0*	(1.3 – 3.2)	140
History of incarceration			
No incarceration (reference group)			380
Incarceration (youth and/or adult)	1.3	(0.6 – 3.2)	26

* Significance based on 95% Confidence Intervals (CI).

^a These two response types were combined due to some sample sizes.

^b Includes those who never went to school.

The relationship between Indigenous specific and social variables (e.g., experiences of racism, stolen generation, cultural identity) and the likelihood of experiencing mental disorders and harmful substance use was explored. Due to less variation in the distribution of response types or low case numbers, results from a logistic regression examining the association between these variables and disorder prevalence in the last 12-months was difficult to interpret. However, some associations with mental disorder prevalence across the lifetime were identified. A series of questions about experiences of being an Aboriginal and/or Torres Strait Islander person in the community were asked and included:

- I am proud to identify myself to others as an Aboriginal and/or Torres Strait Islander Person,
- I experience racism/ discrimination because of my Aboriginal and/or Torres Strait Islander status,
- I feel a sense of connection and belonging to my Aboriginal and/or Torres Strait Islander culture,
- I participate in Aboriginal and/or Torres Strait Islander community events and activities (e.g., National Aborigines and Islanders Day Observance Committee (NAIDOC), Sorry Business), and
- I feel empowered and strong to make positive choices for myself, my family and my community.

Participants who answered sometimes, rarely or never to having a sense of connection and belonging to culture, participation in cultural events and activities, and feeling empowered were 1.7 (1.0 – 2.9), 1.8 (1.1 – 2.8), and 2 (1.1 – 3.7) times more likely to have a mental disorder in their lifetime compared to those who answered always or often, respectively. No statistically significant relationship was found for other Indigenous specific variables and lifetime prevalence of mental disorders.

Comorbidities

Approximately half of the sampled population did not meet criteria for mental disorders and harmful substance use in the last 12 months. Of those who did have a disorder in this time, approximately 30% (25.0 – 34.5%) had one disorder, 13% (10.0 – 16.9%) had two disorders, and 3% (1.5 – 5.4%) had 3 or more disorders (See Table 2.10). The rates of disorder comorbidity did not vary substantially by sex or age.

Table 2.10. Comorbidity between mental disorders and harmful substance use in the past 12 months

Outcome	Sex	Prevalence (%)	95% CI ^a	Cases	Sample
No disorder	All	54.5	(49.3 – 59.6)	228	406
	Female	51.9	(45.9 – 58.0)	157	293
	Male	62.3	(52.0 – 71.5)	70	111
One disorder	All	29.5	(25.0 – 34.5)	116	406
	Female	31.6	(26.2 – 37.5)	89	293
	Male	22.7	(15.4 – 32.3)	26	111
Two disorders	All	13.1	(10.0 – 16.9)	52	406
	Female	13.6	(10.0 – 18.2)	40	293
	Male	12.0	(6.8 – 20.5)	12	111
Three or more disorders	All	2.9	(1.5 – 5.4)	10	406
	Female	2.9	(1.4 – 6.0)	7	293
	Male	3.0	(0.9 – 9.2)	3	111

^a 95% CI: 95% confidence interval.

Service utilisation

Approximately one in two participants (52.2% 47.0 – 57.4%) within the entire sample had accessed a service within the health sector for their mental health in the last 12 months (See Table 3.1). Most of these participants were accessing a mental health specific service provider (i.e., a service provided by psychiatrists, psychologists, other mental health professionals in any setting, social workers, or counsellors in a mental health specialty setting). Service use tended to be higher among women compared to men, however this effect was not statistically significant.

Table 3.1. Service use in the past 12 months for the entire sample

Service	Sex	Proportion accessed (%)	95% CI ^c	Cases	Sample
Any service within health sector	Both	52.2	(47.0 – 57.4)	208	399
	Female	54.3	(48.2 – 60.3)	154	289
	Male	47.7	(37.7 – 58.0)	54	108

Service	Sex	Proportion accessed (%)	95% CI ^c	Cases	Sample
Any mental health service ^a	Both	48.9	(43.7 – 54.1)	196	399
	Female	51.5	(45.4 – 57.5)	147	289
	Male	43.0	(33.3 – 53.3)	49	108
Any service outside health sector ^b	Both	15.1	(11.7 – 19.4)	56	399
	Female	15.9	(11.9 – 21.0)	43	289
	Male	13.3	(7.7 – 22.1)	13	108
Any service	Both	55.2	(49.9 – 60.3)	217	399
	Female	57.3	(51.2 – 63.2)	160	289
	Male	51.0	(40.7 – 61.1)	57	108

^a Service provided by psychiatrists, psychologists, other mental health professionals in any setting, social workers, or counsellors in a mental health specialty setting.

^b Services outside of the health sector includes service provided by spiritual or religious advisers, chiropractors, traditional healers, participation in internet support groups, and self-help groups.

^c 95% CI: 95% confidence interval.

Table 3.2 summarises the proportion of participants accessing services for their mental health and wellbeing in the last 12 months. Participants with a major depressive episode and probable illicit drug use disorder (other) were more likely to be accessing a service within the health or mental health sector. Those with probable cannabis dependence were least likely to be accessing a health service.

Table 3.2. Service use in the past 12 months for those experiencing mental disorders and harmful substance use

Disorder	Any health service use % (95% CI) ^c	Any mental health service use ^a % (95% CI) ^c	Any service outside the health sector ^b % (95% CI) ^c	Any service % (95% CI) ^c
Any mental disorders and harmful substance use	66.0 (58.1 – 73.2)	63.0 (55 – 70.3)	24.6 (18.5 – 32.0)	69.8 (61.9 – 76.6)
Any mental disorder	69.7 (61.4 – 77.0)	66.9 (58.5 – 74.4)	25.2 (18.6 – 33.1)	72.3 (64.1 – 79.3)
Major depressive episode	81.4 (71.6 – 88.4)	80.5 (70.7 – 87.7)	27.7 (19.2 – 38.2)	82.3 (72.6 – 89.1)
Generalised anxiety disorder	61.9 (42.2 – 78.3)	58.9 (39.6 – 75.9)	37.1 (20.7 – 57.0)	67.0 (47.4 – 82.1)

Disorder	Any health service use % (95% CI) ^c	Any mental health service use ^a % (95% CI) ^c	Any service outside the health sector ^b % (95% CI) ^c	Any service % (95% CI) ^c
Post-traumatic stress disorder	67.8 (55.4 – 78.1)	63.5 (51.1 – 74.3)	23.5 (14.8 – 35.3)	69.8 (57.5 – 79.8)
Any harmful substance use	63.2 (45.5 – 78.0)	60.5 (43.0 – 75.7)	32.5 (18.8 – 50.1)	69.4 (51.6 – 82.9)
Probable alcohol dependence	62.5 (40.4 – 80.4)	58.1 (36.5 – 77.0)	27 (12.4 – 49.0)	66.3 (43.8 – 83.3)
Probable cannabis dependence	54.9 (24.3 – 82.2)	54.9 (24.3 – 82.2)	21.5 (4.7 – 60.4)	66.2 (32.5 – 88.8)
Probable illicit drug use dependence (other)	83.2 (28.1 – 98.4)	71.4 (25.9 – 94.7)	52.7 (16.7 – 86.1)	83.2 (28.1 – 98.4)

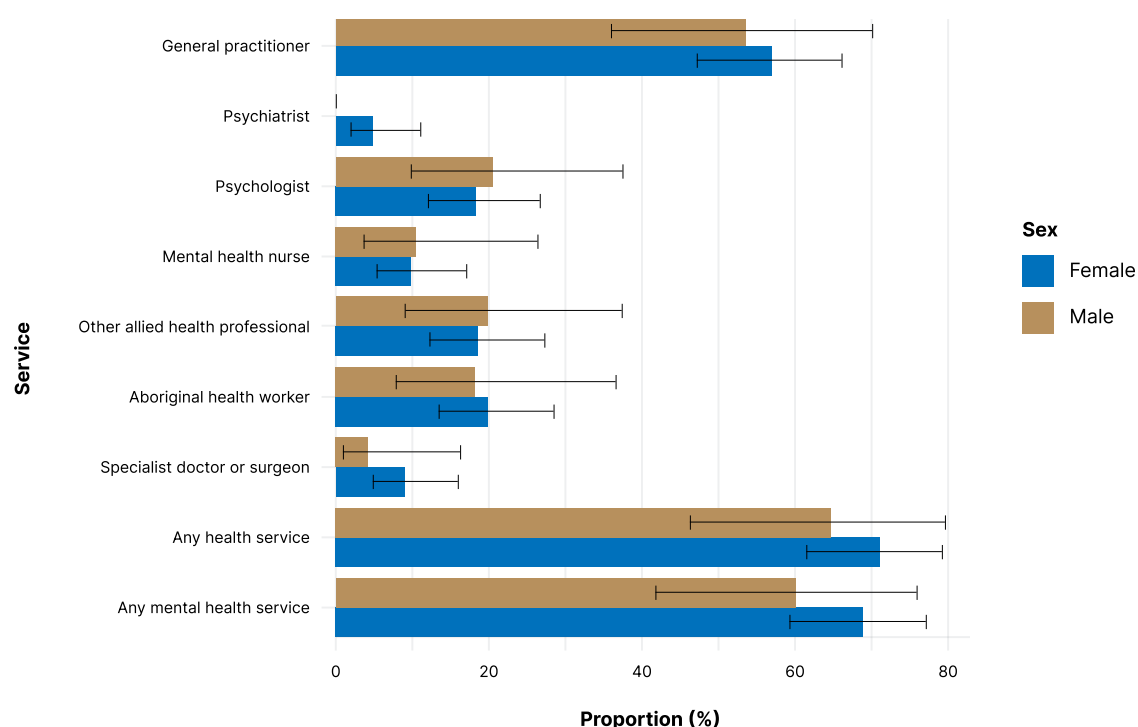
^a Services provided by psychiatrists, psychologists, other mental health professionals in any setting, social workers, or counsellors in a mental health specialty setting.

^b Services outside of the health sector includes service provided by spiritual or religious advisers, chiropractors, traditional healers, participation in internet support groups, and self-help groups.

^c 95% CI: 95% confidence interval.

Figure 3.1 summarises the types of health professional participants experiencing mental disorders and harmful substance use consulted with in the past 12 months for the mental health. One in two participants saw a general practitioner (56.9%, 47.2 – 66.1% of females, 53.5%, 36.0 – 70.1% of males) for their mental health. Approximately one in five participants (18.3%, 12.1 – 26.7% of females, 20.5%, 10.0 – 37.5% of males) saw a psychologist. A similar proportion of participants saw an Aboriginal health worker (19.9%, 13.5 – 28.5% of females, 18.2%, 7.9 – 36.6% of males) and/or and allied health professional (18.6%, 12.3 – 27.3% of females, 19.8%, 9.2 – 37.4% of males). Very few participants consulted with a psychiatrist (4.8%, 2.0 – 11.1% of females, and no males) for their mental health.

Figure 3.1. Types of health professionals and services accessed by those experiencing mental disorders and harmful substance use in the last 12 months, by sex



Participants were also asked where they preferred to access services. For general health, physical health, mental health and sensitive health issues, 74.4% (69.6 – 78.6%) of the sampled population reported preferring ACCHSs as the preferred care provider, as opposed to mainstream service providers. For specialist services, over half (56.3%, 51.1 – 61.4%) of the sampled population reported preferring ACCHSs as their care provider rather than mainstream service providers (See Table 3.3).

Table 3.3. Service Use Preference

Type of health concern	Sex	Proportion preferring ACCHS ^c (%)	95% CI ^a	Cases	Sample
General health (e.g., GP ^b)	Both	74.4	(69.6 – 78.6)	293	398
	Female	72.2	(66.5 – 77.3)	206	288
	Male	79.8	(70.5 – 86.8)	85	108
Physical health (e.g., physiotherapist, podiatrist, dental)	Both	68.0	(62.9 – 72.7)	275	398
	Female	64.0	(57.9 – 69.7)	187	288
	Male	78.8	(69.0 – 86.2)	86	108

Type of health concern	Sex	Proportion preferring ACCHS ^c (%)	95% CI ^a	Cases	Sample
Social, emotional and mental health (e.g., psychologist, counsellor, social worker)	Both	71.3	(66.4 – 75.7)	283	398
	Female	68.0	(62.1 – 73.4)	195	288
	Male	80.0	(70.5 – 87.0)	86	108
Specialist services (e.g., cancer treatment, cardiac rehab, dialysis)	Both	56.3	(51.1 – 61.4)	223	398
	Female	56.3	(50.2 – 62.2)	161	288
	Male	54.9	(44.5 – 64.8)	60	108
Sensitive health issues (e.g., sexual health, drug and alcohol use, domestic violence)	Both	70.5	(65.5 – 75.0)	281	398
	Female	67.3	(61.3 – 72.8)	195	288
	Male	78.6	(69.1 – 85.8)	84	108

^a 95% CI: 95% confidence interval.

^b GP: General practitioner.

^c Aboriginal Community Controlled Health Service.

Recognised need for care

The QUIMHS service utilisation module was adapted from the corresponding module within the Australian 2007 National Survey of Mental Health and Wellbeing (NSMHW) which included the Perceived Need for Care Questionnaire.¹⁹ This instrument assessed participants' needs for five different types of mental health services in the past 12 months (need for medication, information, counselling including psychotherapy, social interventions and skills training). Participants' needs for care were grouped into four categories: No need (if the participant felt they did not need a service and did not access/receive that service), fully met need (if the participant accessed a service and felt they got as much help as they needed), partially met need (if the participant accessed a service but felt they did not get as much of that kind of help as needed), and unmet need (if a participant felt they needed a service and did not access/receive that service).

Within the entire QUIMHS sample (see Table 3.4), 27% of participants had a recognised need for care, and most of these participants (22.4%, 18.2 – 27.1%) had unmet need. The highest level of partially met need was for counselling services and talking therapy (6.2%, 3.9 – 9.5%) and services providing information about mental illness, its treatment, and available services (7.7%, 5.2 – 11.3%). The highest level of unmet need was for skills training (10.3%, 7.5 – 13.9%) and social interventions (11.6% 8.6 – 15.5%).

Table 3.4. Recognised need for services within total sample

Type of service	Recognised need	Proportion (%)	95% CI ^a
Counselling services and talking therapy	No need	66.6	(61.4 – 71.4)
	Fully met need	17.4	(13.7 – 21.8)
	Partially met need	6.2	(3.9 – 9.5)
	Unmet need	9.9	(7.1 – 13.6)
Information about mental illness, its treatment and available services	No need	75.2	(70.3 – 79.5)
	Fully met need	11.0	(8.1 – 14.7)
	Partially met need	7.7	(5.2 – 11.3)
	Unmet need	6.2	(4.0 – 9.3)
Medicine or tablets	No need	76.5	(71.7 – 80.7)
	Fully met need	17.8	(14.1 – 22.1)
	Partially met need	3.3	(1.8 – 6.1)
	Unmet need	2.4	(1.2 – 4.8)
Skills training (including help for housing, ability to work, look after self or home)	No need	82.3	(77.9 – 86.0)
	Fully met need	6.6	(4.4 – 9.9)
	Partially met need	0.8	(0.3 – 2.6)
	Unmet need	10.3	(7.5 – 13.9)
Social intervention (including help to meet people for support or company)	No need	82.1	(77.7 – 85.8)
	Fully met need	4.9	(3.1 – 7.7)
	Partially met need	1.3	(0.5 – 3.1)
	Unmet need	11.6	(8.6 – 15.5)
Any service	No need	61.5	(56.3 – 66.6)
	Fully met need	11.4	(8.5 – 15.2)
	Partially met need	4.6	(2.7 – 7.8)
	Unmet need	22.4	(18.2 – 27.1)

^a 95% CI: 95% confidence interval.

Amongst participants experiencing mental disorders and harmful substance use (see Table 3.5), 46.8% participants had a recognised need for care, and most of these participants (37.4%, 30.1 – 45.3%) had unmet need. The highest level of partially met need within this group of participants was for services providing information about mental illness, its treatment and available services (15.7%, 10.5 – 22.7%). The highest level of unmet need was for social interventions (20.1%, 14.5 – 27.2%). There were no statistically significant differences found between males and females in their recognised need for services.

Table 3.5. Recognised need for services within those experiencing mental disorders and harmful substance use

Type of service	Recognised need	Proportion (%)	95% CI ^a
Counselling services and talking therapy	No need	40.5	(33.0 – 48.4)
	Fully met need	32.1	(25.1 – 39.9)
	Partially met need	13.2	(8.5 – 20.0)
	Unmet need	14.3	(9.6 – 20.7)
Information about mental illness, its treatment and available services	No need	53.7	(45.7 – 61.5)
	Fully met need	21.3	(15.6 – 28.4)
	Partially met need	15.7	(10.5 – 22.7)
	Unmet need	9.3	(5.7 – 15.0)
Medicine or tablets	No need	56.1	(48.1 – 63.7)
	Fully met need	35.5	(28.3 – 43.3)
	Partially met need	5.3	(2.6 – 10.7)
	Unmet need	3.2	(1.3 – 7.6)
Skills training (including help for housing, ability to work, look after self or home)	No need	64.9	(57.0 – 72.0)
	Fully met need	13.8	(9.2 – 20.3)
	Partially met need	1.8	(0.6 – 5.7)
	Unmet need	19.5	(14.0 – 26.6)
Social intervention (including help to meet people for support or company)	No need	67.5	(59.7 – 74.4)
	Fully met need	9.6	(5.9 – 15.0)
	Partially met need	2.9	(1.2 – 6.8)
	Unmet need	20.1	(14.5 – 27.2)

Type of service	Recognised need	Proportion (%)	95% CI ^a
Any service	No need	30.9	(24.0 – 38.7)
	Fully met need	22.3	(16.6 – 29.4)
	Partially met need	9.4	(5.5 – 15.7)
	Unmet need	37.4	(30.1 – 45.3)

^a 95% CI: 95% confidence interval.

Barriers and enablers to care

Participants that indicated they had an unmet or partially met need for their mental health were asked further questions about what prevented them from getting help, or from getting more help, for their mental health, respectively. The responses to this item are detailed below (see Table 3.6). Across all service types, the most common reason for the unmet or partially met need was that participants asked for help but did not receive that help. For information about mental illness, medication and skills training, this barrier accounted for almost half of all responses. For those that had an unmet need for counselling services and talking therapy, a fifth of respondents (20.2%, 10.8 – 34.5%) stated they could not afford the help, and a quarter (24.7%, 14.8 – 38.3%) said they preferred to manage themselves. Both proportions were higher for counselling services and talking therapy than for other service types.

Table 3.6. Barriers to care for those with an unmet need for services

Type of service needed	Barriers to care	Proportion (%)	95% CI ^a
Counselling services and talking therapy	Preferred to manage themselves	24.7	(14.8 – 38.3)
	Didn't think anything more could help	9.7	(4.2 – 20.7)
	Didn't know where to get more help	5.5	(1.7 – 16.1)
	Afraid to ask for help or what others would think of them	2.3	(0.3 – 14.8)
	Couldn't afford help	20.2	(10.8 – 34.5)
	Asked but didn't receive help	27.4	(17.1 – 40.9)
	Got help from another source	3.3	(0.8 – 12.4)

Type of service needed	Barriers to care	Proportion (%)	95% CI ^a
Information about mental illness, its treatment and available services	Preferred to manage themselves	8.1	(2.5 – 23.2)
	Didn't think anything more could help	1.9	(0.3 – 12.5)
	Didn't know where to get more help	18.1	(8.7 – 33.9)
	Afraid to ask for help or what others would think of them	9.8	(3.2 – 26.3)
	Couldn't afford help	10.2	(3.8 – 24.9)
	Asked but didn't receive help	43.0	(28.3 – 59.1)
	Got help from another source	4.6	(1.1 – 16.7)
Medicine or tablets	Preferred to manage themselves	12.8	(3.9 – 34.8)
	Didn't think anything more could help	9.9	(2.3 – 33.2)
	Didn't know where to get more help	16.1	(5.9 – 36.7)
	Afraid to ask for help or what others would think of them	5.8	(0.8 – 31.5)
	Couldn't afford help	8.7	(1.8 – 33.8)
	Asked but didn't receive help	45.3	(25.7 – 66.6)
	Got help from another source	0.0	(0.0 – 0.0)
Skills training (including help for housing, ability to work, look after self or home)	Preferred to manage themselves	14.7	(3.4 – 45.5)
	Didn't think anything more could help	10.9	(2.6 – 36.1)
	Didn't know where to get more help	0.0	(0.0 – 0.0)
	Afraid to ask for help or what others would think of them	9.7	(1.4 – 45.5)
	Couldn't afford help	0.0	(0.0 – 0.0)
	Asked but didn't receive help	52.8	(27.4 – 76.8)
	Got help from another source	11.9	(2.9 – 37.9)

Type of service needed	Barriers to care	Proportion (%)	95% CI ^a
Social intervention (including help to meet people for support or company)	Preferred to manage themselves	14.9	(5.5 – 34.5)
	Didn't think anything more could help	8.6	(2.1 – 29.0)
	Didn't know where to get more help	13.6	(4.4 – 35.1)
	Afraid to ask for help or what others would think of them	17.8	(5.6 – 44.0)
	Couldn't afford help	4.1	(0.6 – 24.2)
	Asked but didn't receive help	22.4	(9.2 – 45.4)
	Got help from another source	7.8	(1.1 – 38.8)

^a 95% CI: 95% confidence interval.

All participants were asked what would make it easier for them to access healthcare at their preferred service provider as an open text item. The overarching themes are summarised in Table 3.7. Almost half (42.5%) of all participants reported that the availability of appointments, the length of waitlists, and waiting time in clinics made it difficult to access services. Many stated they were unable to get an appointment with a treating professional for two to six weeks. When examining responses across preferred service providers (Aboriginal Medical Service (AMS) vs mainstream), the number of respondents per theme was mostly proportional to the number preferring AMS vs mainstream, suggesting that similar barriers exist across both AMS and mainstream services in this sample. The one exception to this was that people whose preferred service provider was an AMS were more likely to report a need for more specialist services compared to those whose preferred service provider was a mainstream service.

Table 3.7. Barriers to access at preferred service provider

Theme	Frequency N = 444 ^a (n, %)	Narratives
Availability • Need for afterhours, weekend, telehealth, and phone appointments • Long waitlists and wait times	189, 42.5%	<i>"Opening hours aren't accessible for fulltime workers."</i> <i>"No one available for 6 weeks – I'm sick now, not in 6 weeks."</i> <i>"If you have a 10AM appointment you can often wait about 2-3 hours to see them, so I just don't go."</i>

Theme	Frequency N = 444 ^a (n, %)	Narratives
Logistical issues - No transport or parking - No online booking - Not close enough	61, 13.7%	<i>"I don't own a car... it's not easy to get to. I don't qualify for transport from the centre."</i> <i>"One that's closer, I have to drive 40 minutes to my closest one."</i>
Cultural needs - More culturally aware or identified staff - Less politics - Male/Female staff needed for Men's/ Women's business - Confidentiality issues	25, 5.6%	<i>"It insults my cultural integrity to be receiving mainstream services at my local AMS, this is why I decided to change to mainstream."</i> <i>"Not having faith in the confidentiality of mob not telling mob."</i>
Administrative issues - Need for consistent staff - Administrative processes lacking	22, 4.9%	<i>"A GP that's going to be there long term – I've had a few different doctors over the last couple of months."</i> <i>"I don't get follow-ups or communication about appointments."</i>
More service types needed - Need for more specialist services - Need for home visits - Need for partnerships with mainstream services	21, 4.7%	<i>"Services supporting all needs, from child protection to disability and elder care."</i> <i>"Not all clinics have dentists, dietary, physio, etc."</i>
Lack of information about services	16, 3.6%	<i>"If I knew where they were – I have no idea about where they are located."</i> <i>"Knowing where they are available and what is available."</i>
Financial cost	10, 2.3%	<i>"More bulk billing to cover costs for all health services."</i> <i>"CTG to cover all medication costs."</i>
No changes	80, 18.0%	<i>"Everything is easy"</i> <i>"I'm getting a good service."</i>

^a Some responses were coded over multiple themes, leading to 444 discrete comments from 406 participants.

Impacts of the COVID-19 pandemic

Given that QUIMHS data collection occurred during the COVID-19 pandemic while residents of SEQ were experiencing elevated community transmission of COVID-19, it was important to interpret our findings within the context of the perceived impact of COVID-19 on participants' mental health and use/access to services. The QUIMHS COVID-19 module asked participants the degree and the kinds of impact the COVID-19 pandemic had on them. We conducted a series of logistic regressions to investigate associations between selected COVID-19 indicator variables and the prevalence of mental disorders and harmful substance use in the last 12 months. This analysis produced odds ratios, which can be interpreted as the likelihood of experiencing mental disorders and harmful substance use across various levels of a given COVID-19 indicator variable.

The results of this analysis are presented in Table 4.1. Participants who reported a change to their work or personal finances because of the COVID-19 pandemic were more between 1.3 and 1.7 times more likely to experience mental disorders and harmful substance use in the last 12 months when compared with participants who did not select that response. In addition, participants who reported "a great deal" of worry or distress about separation from their family or close friends, cancellation or restriction of significant life events, or being unable to participate in recreational activities as a result of the COVID-19 pandemic were approximately twice as likely to experience mental disorders and harmful substance use in the last 12 months compared to those who reported no worry or distress for those items.

One of the indicator variables was a 'perceived negative COVID-19 impact' composite score estimated from four survey items. Participants were asked whether the COVID-19 pandemic impacted on their mental health, physical health, relationships with significant others, and time spent doing activities such as hobbies, sports, or learning. They identified whether each of these items were worse than before, the same as before, or better than before the pandemic occurred. Participants were considered worse off following the pandemic if they indicated they were worse off on any item and not better off on any item. Participants who reported to be worse off following the pandemic were twice more likely to experience mental disorders and harmful substance use than those indicating either they were better off than before the pandemic, about the same, or a mix of items that were better and worse off than before the pandemic.

Table 4.1. Associations between impacts of COVID-19 and mental disorders and harmful substance use

COVID-19 impact variable	Odds Ratio	95% CI ^a	Sample
Changes to work arrangements, hours or employment status			
Reduction in work hours			
No reduction in work hours (reference group)			342
Reduction in work hours	0.9	(0.5 – 1.6)	57
Increase in work hours			
No increase in work hours (reference group)			357
Increase in work hours	2.0	(1.0 – 3.8)	42
Loss of employment			
None (reference group)			378
Lost employment	1.2	(0.5 – 3.1)	21
Requirement for remote work from home			
None (reference group)			304
Change to remote work from home	1.5	(1.0 – 2.5)	95
Any change to work arrangements			
None (reference group)			221
Change to work	1.7*	(1.1 – 2.5)	178
Changes to personal finances			
Experienced financial hardship			
None (reference group)			355
Financial hardship	1.1	(0.6 – 2.1)	44
Required financial assistance			
None (reference group)			354
Required financial assistance	1.7	(0.9 – 3.3)	45
Change to personal finances			
No change to personal finances (reference group)			286
Any change to personal finances	1.3	(0.8 – 2.0)	113

COVID-19 impact variable	Odds Ratio	95% CI ^a	Sample
Worry or distress about...			
Getting infected			
Not at all/Not applicable (reference group)			145
Somewhat	1.2	(0.7 – 1.9)	152
A great deal	1.4	(0.8 – 2.4)	100
Family or someone close getting infected			
Not at all/Not applicable (reference group)			85
Somewhat	1.1	(0.6 – 2.1)	125
A great deal	1.5	(0.9 – 2.7)	187
News and social media coverage			
Not at all/Not applicable (reference group)			208
Somewhat	0.9	(0.6 – 1.5)	108
A great deal	1.4	(0.8 – 2.4)	83
Changes to work arrangements			
Not at all/Not applicable (reference group)			245
Somewhat	0.8	(0.4 – 1.3)	87
A great deal	1.1	(0.6 – 1.9)	65
Changes to personal finance			
Not at all/Not applicable (reference group)			264
Somewhat	0.8	(0.4 – 1.4)	78
A great deal	1.1	(0.6 – 1.8)	55
Housing being affected			
Not at all/Not applicable (reference group)			301
Somewhat	0.4*	(0.2 – 0.8)	56
A great deal	0.9	(0.5 – 1.9)	40

COVID-19 impact variable	Odds Ratio	95% CI ^a	Sample
Home-schooling or child-care responsibilities			
Not at all/Not applicable (reference group)			283
Somewhat	0.9	(0.5 – 1.6)	58
A great deal	1.3	(0.7 – 2.3)	56
Separation or distancing from family or someone else			
Not at all/Not applicable (reference group)			153
Somewhat	1.0	(0.6 – 1.6)	132
A great deal	1.9*	(1.1 – 3.2)	112
Cancellation or restriction of significant life events			
Not at all/Not applicable (reference group)			180
Somewhat	1.2	(0.7 – 1.9)	130
A great deal	1.9*	(1.1 – 3.3)	87
Being unable to do recreational activities			
Not at all/Not applicable (reference group)			165
Somewhat	1.0	(0.6 – 1.6)	153
A great deal	2.4*	(1.3 – 4.3)	79
Problems with relationships at home			
Not at all/Not applicable (reference group)			304
Somewhat	0.9	(0.5 – 1.5)	77
A great deal	2.0	(0.7 – 6.0)	16
Being unable to participate in culturally significant activities and events			
Not at all/Not applicable (reference group)			132
Somewhat	1.2	(0.7 – 2.0)	152
A great deal	1.4	(0.8 – 2.4)	113

* Significance based on 95% Confidence Intervals (CI).

^a 95% CI: 95% confidence interval.

Participants were asked about how the COVID-19 pandemic impacted on their use of services for their mental health and substance related problems (including alcohol and medications). As shown in Table 4.2, approximately one in five participants within the entire sample (22.7%, 18.5 – 27.4%) stated they needed more support for their mental health as a result of the COVID-19 pandemic. There was relatively little change to need for support for substance related problems. Most participants already using mental health and substance use services continued using them as normal (35.1%, 30.3 – 40.2%), and some had changes to how and when these services were provided (11.0%, 8.1 – 14.5%). Flexible access options (such as telehealth or telephone services) were rated highest amongst factors that made accessibility to mental health and substance use services easier (10.6%, 7.7 – 14.5%), however, equal numbers of participants reported that they were more comfortable using telehealth/telephone services (5.5%, 2.5 – 8.5%) as those who reported they were not comfortable using telehealth/telephone services (4.5%, 2.8 – 7.2%).

Table 4.2. Impact of COVID-19 on service utilisation within the entire sample

COVID-19 Impact	Responses	Proportion (%)	95% CI ^a
Need for support for mental health	Needed less support than before	4.2	(2.5 – 7.0)
	Needed more support than before	22.7	(18.5 – 27.4)
	No change	72.5	(67.5 – 77)
Need for support for substance related problems	Needed less support than before	1.8	(0.8 – 4.0)
	Needed more support than before	4.5	(2.7 – 7.4)
	No change	92.8	(89.5 – 95.2)
Impact on <u>use</u> of mental health and substance use services	Already accessed services but access (how/when) changed	11.0	(8.1 – 14.8)
	Already accessed services and continued as normal	35.1	(30.3 – 40.2)
	Did not use any MH or SU services	44.7	(39.5 – 49.9)
	Wanted to seek support and did so	5.1	(3.1 – 8.2)
	Wanted to seek support and did not	2.5	(1.3 – 4.8)
Impact on <u>access</u> to mental health and substance use services*	Appointments cancelled or could no longer attend	3.1	(1.7 – 5.5)
	I had less appointments than before	1.5	(0.6 – 3.7)
	I had more appointments than before	0.4	(0.0 – 2.5)
	Appointments changed to phone	4.5	(2.8 – 7.2)
	Appointments changed to telehealth (video)	8.6	(6.1 – 12.1)

COVID-19 Impact	Responses	Proportion (%)	95% CI ^a
What made it <u>easier</u> to access mental health and substance use services*	More acceptable to access help	3.6	(2.1 – 6.3)
	More time available	3.4	(1.8 – 6.1)
	More finances available	0.9	(0.3 – 2.8)
	More flexible access options available	10.6	(7.7 – 14.5)
	More comfortable accessing telehealth/phone services	5.5	(3.5 – 8.5)
	More information about services available	2.5	(1.2 – 4.8)
	None of these apply	4.1	(2.5 – 6.7)
	Other	0.2	(0.0 – 1.6)
What made it <u>harder</u> to access mental health and substance use services*	Less acceptable to access help	0.8	(0.2 – 2.5)
	Less time available	2.4	(1.2 – 4.7)
	Less finances available	3.9	(2.3 – 6.6)
	Unable to access telehealth/phone services	2.5	(1.3 – 4.7)
	Not comfortable accessing telehealth/phone services	4.5	(2.8 – 7.2)
	Unsure where to get help	2.9	(1.5 – 5.4)
	Did not want to risk infection	3.4	(2.0 – 5.9)
	Policies/precautionary measures prevented me	2.4	(1.2 – 4.6)
	None of these apply	5.1	(3.2 – 8.2)
	Other	0.6	(0.1 – 2.5)

^a 95% CI: 95% confidence interval.

* Within respondents who already accessed services but access (how/when) changed.

Comparison to other surveys

It is useful to compare QUIMHS findings against findings from other similar surveys. However, given the differences in data collection methodologies, any comparison and interpretation must be carefully considered. The two surveys closest in timing of data collection and scope for comparison to QUIMHS findings are the National Study of Mental Health and Wellbeing conducted in 2020-21 (NSMHW, 2020-21)²⁰ and the National Aboriginal and Torres Strait Islander Health Survey conducted in 2018-19 (NATSIHS-2018-19).²¹

Table 5.1 compares the data collection method across QUIMHS, NSMHW 2020-21 and NATSIHS 2018-19. The NSMHW 2020-21 study was conducted by the ABS as part of a broader Intergenerational Health and Mental Health study. It surveyed a representative sample of Australian residents aged 16 – 85 years, from private dwellings. Structured face-to-face interviews were conducted to capture information on the lifetime and 12-month prevalence of mental and substance use disorders, health services accessed by participants for mental health problems, suicidality, as well as demographic and socio-economic characteristics of participants. Survey findings released by the ABS represent national estimates, with the sample size not sufficiently large to present estimates disaggregated by state or Indigenous status.²²

The NATSIHS 2018-19 survey was also conducted by the ABS and forms part of a survey series which occurs every 6 to 8 years. NATSIHS 2018-19 used a representative sample of Aboriginal and Torres Strait Islander adults from non-remote and remote areas of Australia, including discrete Indigenous communities. Face-to-face interviews were undertaken to capture information on long-term health conditions, mental wellbeing, lifestyle factors, and access of health services.²³

Table 5.1. Data collection processes across QUIMHS, NSMHW 2020-21 and NATSIHS 2018-19

Survey process	QUIMHS	NSMHW 2020-21 ^a	NATSIHS 2018-19 ^b
Timeframe for data collection	2022	2020-2021	2018-2019
Case definition available	Estimates of psychological distress in past month Diagnosis of mental disorders and harmful substance use based on DSM-IV-TR^c in past 12 months	Estimates of psychological distress in past month Diagnosis of mental and substance use disorders based on ICD-10^d in past 12 months Diagnosis based on DSM-IV-TR^c possible but currently not available	Estimates of psychological distress in past month No diagnostic data available

Survey process	QUIMHS	NSMHW 2020-21 ^a	NATSIHS 2018-19 ^b
Mental health indicator	Kessler-5 measure of psychological distress CIDI 3.0 ^e structured diagnostic interview for mental disorders Customised structured diagnostic module for harmful substance use	Kessler-10 measure of psychological distress CIDI 3.0 ^e structured diagnostic interview for mental and substance use disorders	Kessler-5 measure of psychological distress
Target participants	Aboriginal and Torres Strait Islander residents of southeast Queensland	Nationally representative sample of Australian adults living in private dwellings across urban/rural areas in all states and territories	Nationally representative sample of Aboriginal and Torres Strait Islander adults living in private dwellings
Sampling strategy	Mixed-method sampling involving both snowballing process and household sampling (not a randomised sample)	Randomised Household sample	Randomised Household sample
Age of sample	18+ years	18+ years	18+ years
Indigenous status	Data available for Indigenous Australians	Data not available by Indigenous status	Data available for Indigenous Australians
Location status	Data available for southeast Queensland only	Only nationally representative data available	Data can be subset to locations within southeast Queensland
Sample size	406	5554	10500

^a NSMHW 2021-22: National Study of Mental Health and Wellbeing 2021-22.²²

^b NATSIHS 2018-19: National Aboriginal and Torres Strait Islander Health Survey.²³

^c DSM-IV: Diagnostic and Statistical Manual of Mental Disorders.

^d ICD-10: International Classification of Diseases.

^e CIDI 3.0: Composite International Diagnostic Interview 3.0.

Comparison with NSMHW 2020-21 results

Comparisons between QUIMHS and NSMHW 2020-21 allowed us to compare prevalence rates of psychological distress and mental and substance use disorders, suicidal behaviours, and service utilisation against a nationally representative sample of Australian adults. It's important to interpret these comparisons cautiously, given differences in the data-collection methodology across these two surveys. Notes on interpretation are presented alongside the comparisons in this section.

The NSMHW 2020-21 used the Kessler-10 (K10)²² scale as a measure of psychological distress within the past four weeks. The K5 scale utilised within QUIMHS has been adapted from the K10 for administration within Indigenous Australian populations. The NSMHW 2020-21 estimated that in 2020-21, 15.4% of Australians had experienced high or very high levels of psychological distress on the K10. By comparison, the QUIMHS survey estimated that in 2022, approximately 45.8% of the sample reported high/very high levels of psychological distress on the K5.

Table 5.2 summarises the prevalence of mental disorders and harmful substance use across these two surveys. The prevalence distribution of disorders (relative to each other) was similar across both surveys, with major depressive episode being the most common disorder in the past 12 months, followed by post-traumatic stress disorder, and generalised anxiety disorder respectively. However, as was the case for psychological distress, prevalence estimates were significantly elevated within the QUIMHS sample compared to within the NSMHW 2020-21 sample. Overall, there was about double the number of participants experiencing mental disorders and harmful substance use in the past 12 months within QUIMHS compared to NSMHW 2020-21. Approximately one in two Indigenous Australians in the QUIMHS sample experienced mental disorders and harmful substance use in the past 12 months, compared to one in five Australians within the NSMHW 2020-21 sample. A major depressive episode and post-traumatic stress disorder were about five and three times more prevalent within the QUIMHS sample compared to the NSMHW 2020-21 sample, respectively. The prevalence of harmful substance use was approximately two times more prevalent within the QUIMHS sample compared to the NSMHW 2020-21 sample.

Table 5.2. QUIMHS and NSMHW 2020-21 prevalence of mental disorders and harmful substance use in the past 12 months

Disorder	QUIMHS ^a % (95% CI) ^c	NSMHW 2020-21 ^b % (95% CI) ^c
Major depressive episode	24.6 (20.4 – 29.3)	4.6 (4.0 – 5.2)
Generalised anxiety disorder	8.1 (5.7 – 11.4)	3.8 (3.3 – 4.3)
Post-traumatic stress disorder	19.9 (16.1 – 24.5)	5.7 (5.1 – 6.3)
Probable alcohol dependence	6.3 (4.2 – 9.4)	0.9 (0.7 – 1.1)
Probable illicit drug dependence	2.4 (1.2 – 4.7)	1.0 (0.7 – 1.3)
Any harmful substance use	5.5 (3.5 – 8.5)	3.3 (2.8 – 3.8)
Any mental disorder or harmful substance use	44.5 (40.5 – 50.8)	21.4 (20.3 – 22.5)

^a QUIMHS: Queensland Urban Indigenous Mental Health Survey.

^b Prevalence estimates from the National Study of Mental Health and Wellbeing 2020-21 (NSMHW 2020-21) obtained elsewhere²². The 95% confidence intervals for prevalence estimates from this survey are indicative as they were estimated based on the reported sample size only.

^c 95% CI: 95% confidence interval.

In terms of suicidality, NSMHW 2020-21 reported that 16.7% of Australians had ever experienced suicidal thoughts, 7.7% had ever made a suicidal plan, and 4.8% had ever attempted to take their own life. By comparison, QUIMHS reported higher rates of suicidal behaviours with 55.2% of participants ever experiencing suicidal thoughts, 26.3% ever making a suicidal plan, and 20.7% ever attempting to take their life. Approximately 38.0% of Australians from NSMHW 2020-21 compared to 57.5% of Indigenous Australians from QUIMHS reported that they had lost a close friend or family member to suicide over the course of their lives.

We were limited in the comparisons of service utilisation between QUIMHS and NSMHW 2020-21 to what has currently been publicly released for NSMHW 2020-21. Overall, we saw greater rates of service utilisation amongst QUIMHS participants compared to NSMHW 2020-21 participants. At the national level NSMHW 2020-21 reported that 17.5% of Australians saw a health professional in the last 12 months for their mental health compared to 52.2% (47.0 – 57.4%) of Indigenous Australians within QUIMHS. Amongst those with a mental or substance use disorder in the last 12 months, rates of service utilisation was closer between the two surveys, with 41.7% of Australians having seen a health professional for their mental health within NSMHW 2020-21 compared to 66% (58.1 – 73.2%) of Indigenous Australians within QUIMHS.

As noted above, not all differences in disorder prevalence, suicidal behaviours and service utilisation between these two surveys can be attributed to 'true' differences between the population of Indigenous Australians in SEQ and Australians nationally. We have listed here some of the differences between samples that need to be considered when interpreting these comparisons.

- Firstly, we compared estimates from a sample of Indigenous Australians from SEQ against a sample of both Indigenous and non-Indigenous Australians nationally. As the national data from NSMHW 2020-21 cannot be disaggregated by location or Indigenous status, some of the observed difference in the data may be explained by variations across locations or groups in those locations (e.g., variations in cultural, health and overall socio-demographic differences). This may lead to higher or lower estimates of prevalence/service use.
- Secondly, it is also important to acknowledge the COVID-19 context. While both surveys undertook data collection during the COVID-19 pandemic, they were at different time points during the pandemic, with different states and territories being impacted differently. Participants' mental health and their access to services may have been impacted differently at different stages of the pandemic. Potential impact of the COVID-19 pandemic on the data is presented in the discussion section of this report.
- Thirdly, QUIMHS study participants heard about the survey through snowball sampling, which included the project's community engagement efforts and Facebook campaign. This may have introduced a self-selection bias whereby participants were more likely to identify strongly with the survey topic, to be more engaged within the community, in touch with a health service, or more willing and comfortable speaking about their mental health than the broader population compared to the random household sample of participants from the NSMHW 2020-21. It is unclear whether this would have led to greater or lower rates of prevalence/service use in the QUIMHS sample compared to the general population.

- Last, there are differences in the case definitions of mental and substance use disorders between QUIMHS and NSMHW 2020-21. The prevalence data currently available for NSMHW 2020-21 make use of International Classification of Diseases (ICD-10) classifications while QUIMHS estimates made use of DSM-IV-TR classifications. Additionally, QUIMHS focused on major depressive episodes, made use of a customised module to measure harmful substance use, and used the K5 as a measure of psychological distress. By comparison, NSMHW 2020-21 captured major depressive disorder as well as other form of depression, the CIDI 3.0 was used to measure the prevalence of substance use disorders, and the K10 which contains more items on psychological distress was used. This may impact on the number of cases reported with a disorder across surveys.

Comparison with NATSIHS 2018-19 results

Comparisons between QUIMHS and NATSIHS 2018-19 allow us to compare rates of psychological distress on in the past 4 weeks (as measured by the K5) between a sample of Indigenous Australians in SEQ in 2022 (as collected by QUIMHS) against similar results from a representative sample of Indigenous Australians from SEQ in 2018-19 (as collected by NATSIHS 2018-19). NATSIHS 2018-19 results can be subset to specific locations within SEQ captured by the QUIMHS survey which facilitated this location-specific comparison. As presented in Table 5.3, NATSIHS 2018-19 estimated that in 2018-19, 27.7% of Indigenous Australians in SEQ had experienced high or very high levels of psychological distress. By comparison the QUIMHS survey estimated that in 2022, approximately 45.8% of the sample reported high/very high levels of psychological distress. This difference was similar across both males and females.

Table 5.3. Proportion (%) of cases reporting high/very high psychological distress in QUIMHS compared to NATSIHS 2018-19

Sex	QUIMHS ^a % (95% CI) ^c	NATSIHS 2018-19 ^b % (95% CI) ^c	Difference % (SE) ^d
Female	45.9 (39.8 – 52.2)	29.9 (27.1 – 32.7)	16.0 (3.4)
Male	45.3 (35.2 – 55.4)	24.9 (19.9 – 29.9)	20.4 (5.8)
Total	45.8 (40.6 – 51.0)	27.7 (25.9 – 29.5)	18.1 (2.8)

^a QUIMHS: Queensland Urban Indigenous Mental Health Survey.

^b Proportions estimated from the National Aboriginal and Torres Strait Islander Health Survey.²³

^c 95% CI: 95% confidence interval.

^d SE: Standard error.

It is important to note that the difference between high/very high levels of psychological distress in QUIMHS compared to NATSIHS 2018-19 is not directly equivalent to what the difference in the prevalence of mental disorders and harmful substance use would be between surveys had NATSIHS 2018-19 also surveyed disorder prevalence. As presented earlier on rates of psychological distress, of those participants scoring high/very high on the K5 in the QUIMHS sample, 64.9% (57.2 – 71.9%) went on to meet diagnostic criteria for mental disorders and harmful substance use in the past 12 months. An additional 29.3% (23.2 – 36.1%) of cases reporting low/moderate psychological distress also went on to meet diagnostic criteria for mental disorders and harmful substance use in the past 12 months.

Not all differences in psychological distress between the two surveys will be due to 'true' differences between samples. Some of the differences will also be explained by measurement error. Here we have presented two potential sources of measurement error that are important to consider when interpreting findings, however, this list is not exhaustive.

- Firstly, a portion of this difference could be due to sampling bias within the QUIMHS sample. QUIMHS did not use a randomised household sample of participants, with greater reliance on word of mouth and snowballing methods to recruit participants. Some of the observed difference in prevalence may therefore be due to differences in the circumstances of participants more likely to participate in the QUIMHS survey compared to the random household sample of participants from the NATSIHS 2018-19. This may lead to either an increase or decrease in rates of psychological distress reported.
- Secondly, a portion of the elevated cases of psychological distress within the QUIMHS sample could be due to the impact of COVID-19. Analyses presented earlier in this report on the impacts of the COVID-19 pandemic identified that participants' mental health was negatively impacted by the pandemic. There is currently no comparable NATSIHS data collected during the COVID-19 pandemic for us to compare QUIMHS data against.

It is difficult, with the data that is currently available, to directly quantify the proportion of the elevated cases of psychological distress within the QUIMHS sample that is due to the COVID-19 pandemic versus measurement error from sampling processes. However, we conducted a sensitivity analysis to estimate the 'adjusted prevalence' of mental disorders and harmful substance use within the QUIMHS survey. In this analysis our original prevalence estimates were weighted by the difference in high/very high psychological distress scores from the NATSIHS 2018-19 survey. We adopted a conservative approach by assuming that all the difference between high/very high levels of psychological distress between QUIMHS and NATSIHS 2018-19 was due to measurement error. This is conservative in the sense that the adjusted-prevalence estimates will likely be an underestimate of the true prevalence of mental and substance use disorders within the broader population of Indigenous Australians within SEQ as we do not consider the impact of COVID-19 on prevalence.

Table 5.4 compares the raw prevalence of mental disorders and harmful substance use against the equivalent adjusted prevalence after accounting for the difference in reported levels of psychological distress from the NATSIHS 2018-19 survey. Overall, the prevalence of mental disorders and harmful substance use decreased by 7.3% from 45.6% (40.5 – 50.8%) to 38.3% (33.2 – 43.2%) after this adjustment. Most of this decrease occurred within mental disorders as opposed to harmful substance use which was not surprising, as K5 items are most associated with symptoms of common mental disorders such as depression and anxiety disorders. The disorders with the greatest change in prevalence were major depressive episode which decreased by 6.9% from 24.6% (20.4 – 29.3%) to 17.7% (14.3 – 21.8%) and post-traumatic stress disorder which decreased by 3.8% from 19.9% (16.1 – 24.5%) to 16.1% (12.6 – 20.5%).

Table 5.4. Sensitivity analysis showing raw and adjusted prevalence of mental disorders and harmful substance use in the past 12 months

Disorder	Unadjusted prevalence % (95% CI) ^a	Adjusted prevalence ^b % (95% CI) ^a
Major depressive episode	24.6 (20.4 – 29.3)	17.7 (14.3 – 21.8)
Generalised anxiety disorder	8.1 (5.7 – 11.4)	7.4 (5.0 – 10.9)
Post-traumatic stress disorder	19.9 (16.1 – 24.5)	16.1 (12.6 – 20.5)
Any mental disorder	40.2 (35.2 – 45.4)	32.1 (27.3 – 37.3)
Any harmful use	10.3 (7.5 – 14.0)	9.8 (7.0 – 13.7)
Any mental disorder or harmful substance use	45.6 (40.5 – 50.8)	38.3 (33.2 – 43.8)

^a 95% CI: 95% confidence interval.

^b Adjusted prevalence accounts for the difference in reported levels of psychological distress from the NATSHIS 2018-19 survey.

Discussion

Significance of the research

The QUIMHS project was successful in administering a mental health prevalence survey, containing standardised diagnostic instruments and processes, to an urban Indigenous Australian community sample. This is the first epidemiological study to be conducted at this scale in Australia to report on mental disorders and harmful substance use prevalence and service use within the broader Indigenous Australian community in SEQ. The project's guiding principles and processes were critical to this success. All work was executed under conditions that were deemed culturally appropriate and safe for participants by Indigenous stakeholders and was designed to deliver findings that were scientifically robust.

The project was guided by a Steering Committee comprising Indigenous representatives and Indigenous and non-Indigenous experts in mental health and services research. Guidance from the steering committee was complemented with efforts by the QUIMHS research team to work closely with Indigenous stakeholders and community members to first develop and test a methodological framework, then administer the survey. QUIMHS survey methods allowed for flexibility, sensitivity, and responsiveness to community needs. This proved to be useful in an ever-changing environment where researchers and communities alike were faced with challenges such as COVID-19 waves and natural disasters.

Summary and interpretation of findings

Almost half (45.8%) of participants reported high/very high levels of psychological distress in the four weeks prior to the survey, with a similar proportion of participants (45.6%) experiencing mental disorders and harmful substance use within the 12 months prior to the survey. Mental disorders and harmful substance use were evident across all ages and males and females tended to be equally impacted. The most common disorders were major depressive episode (24.6%), and post-traumatic stress disorder (19.9%). Just over half (54.5%) of participants did not experience mental disorders or harmful substance use in the 12 months leading up to the survey, indicating that many participants were in a good mental health state and had been coping well. It is important to note however that only 64.9% of those reaching high/very levels of psychological distress in the last four weeks (according to the K5) met diagnostic criteria for a disorder in this survey. It is possible that some of the remaining participants with elevated psychological distress were experiencing other disorders not captured within this survey, or experiencing the new onset of a disorder not able to be captured by the survey. Overall, prevalence levels detected within QUIMHS indicate potentially high rates of mental disorders and harmful substance use within the broader Indigenous Australian community in SEQ. They provide better insight into our previous understanding of mental disorders and harmful substance use as significant contributors to the disability and burden experienced by Indigenous Australian in SEQ²⁴ and where services are most needed.

We identified several socio-demographic and cultural indicators significantly correlated with higher prevalence of mental disorders or harmful substance use. Participants sleeping rough or homeless were almost six times more likely to have a mental disorder or harmful substance use in the last 12 months compared to homeowners. Participants reporting financial stress were two times more likely to experience a mental disorder or harmful substance use in the last 12 months compared to those reporting no financial stress. The connection between these variables and mental health can be complex and bi-directional. However, for many individuals experiencing a mental disorder or harmful substance use, obtaining and sustaining stable employment and/or housing can be challenging, which further exacerbates their physical and mental health, economic security, access to social networks, and use of health services.²⁵ Participants who reported lower rates of connection and belonging to culture, participation in cultural events and activities, and feelings of empowerment were approximately twice as likely to have a mental disorder in their lifetime compared to those indicating stronger cultural connection and belonging, greater participation, and more empowerment. These findings reinforce the protective role of cultural identity on the health and wellbeing of Indigenous Australians.²⁶ More research directed at quantifying this impact is important, particularly within the context of mental disorder prevention and intervention at a population level.

Mental disorders and harmful substance use were experienced at different levels of severity within our sample. Most participants experiencing a mental disorder or harmful substance use reported poorer health status than those without a disorder (as measured by the SF-12). Participants with a major depressive episode, generalised anxiety disorder, and probable illicit drug dependence reported poorer health status. The observed trend in health status for major depressive episode and probable illicit drug use dependence is consistent with our broader understanding of these disorders being highly disabling with significant functional impairment.^{27,28} Typically, we expect functional impairment caused by post-traumatic stress disorder to be greater than generalised anxiety disorder, which was not the case here. Given that there were more cases of post-traumatic stress disorder within our sample it is possible that we had a more diverse distribution of responses for this disorder, however more research is required to better interpret this difference. Information on the severity and health status associated with mental disorders and harmful substance use has important applications in service planning or clinical practice. It can be used as a meaningful threshold to inform guidelines on when to seek or stop treatment, as well as the type and amount of treatment required for various disorders.

As further indication of the severity and impact of mental disorders and harmful substance use, one in two participants (55.2%) had experienced suicidal thoughts, one in four participants (26.3%) had ever made a suicidal plan, and one in five participants (20.7%) had ever attempted suicide. All participants who reported making plans or had attempted suicide in the 12 months prior to the survey met criteria for a mental disorder or harmful substance use. Suicide has been identified as a significant contributor to the premature mortality experienced by Indigenous Australians.²⁹ The findings reported here provide further emphasis for the promotion of positive mental health and social and emotional wellbeing in the prevention of suicide within Indigenous Australian communities.

Approximately 66% of participants experiencing a mental disorder or harmful substance use had accessed a health service in the 12 months prior to the survey. Those with a major depressive episode (81%) and those with a probable illicit drug use disorder (83.2%) were more likely to have accessed treatment. Overall, participants preferred accessing ACCHSs over mainstream services for all types of health concerns. Most participants experiencing a mental disorder or harmful substance use had accessed a service within the mental health sector, provided by a general practitioner.

It was encouraging to note that 22.3% of individuals experiencing a mental disorder or harmful substance use in the 12 months prior to the survey regarded themselves as having that need met by services. However, there is unquestionably more work to be done in closing the gap between met need and unmet need and between a recognised need for care and actual care within our sample. Of the participants experiencing a mental disorder or harmful substance use in the 12 months prior to the survey, 66% sought help from a health professional for their mental health while 34% did not. Of the 34% not accessing care, 46.8% perceived a need for that care (9.4% perceived partially met need and 37.4% perceived unmet need). The highest level of partially met need was for services providing information about mental illness, its treatment, and available services (15.7%). The highest level of unmet need was for social interventions (20.1%). Across all service types, the most common reason for the partially met or unmet need was that participants asked for help but did not receive that help. The highest level of fully met need was for more conventional services such as medicines and tablets (35.5%) and counselling services and talking therapy (32.1%) which have received greater emphasis within service provision in recent years.

QUIMHS participants perceived significant impacts of the COVID-19 pandemic on their mental health across several domains. Participants that indicated that their mental health, physical health, relationships, or time spent doing extracurricular activities and learning had worsened due to the pandemic were twice more likely to experience a mental disorder or harmful substance use than those indicating that these factors had not changed. Additionally, those reporting no change to their work and personal finances because of the COVID-19 pandemic were 40% less likely to experience a mental disorder or harmful substance use in the last 12 months when compared with participants that did not select that response. Those reporting “a great deal” of worry or distress about separation from their family or close friends, cancellation, or restriction of significant life events, or being unable to participate in recreational activities because of COVID-19 were twice as likely to experience a mental disorder or harmful substance use in the last 12 months compared to those who reported no worry or distress for those items. Our results indicate that the COVID-19 pandemic created an environment where many of the determinants of mental health worsened.

When asked about the impact of the pandemic on their access of services, approximately one in five of all participants (22.7%) stated they needed more support for their mental health because of the COVID-19 pandemic. There was relatively little change to need for support for substance related problems. Most participants already using mental health and substance use services continued using them as normal (35.1%), and some experienced changes to how and when these services were provided (11.0%). Flexible access options (such as telehealth or telephone services) were rated highest amongst factors that made accessibility to mental health and substance use services easier.

Previous work quantifying the impact of COVID-19 on mental disorders showed an increase in the global prevalence of depressive and anxiety disorders in 2020 as a result of the pandemic.³⁰ Meeting this added demand for mental health services has been challenging for most populations. However, there are mitigation strategies that can be used to respond to the mental health needs of communities during the COVID-19 pandemic. These resources include strategies that make the best use of already competing resources, consider the local context, attend to vulnerable populations, and emphasize inclusivity, stigma reduction, and human rights.³¹

Comparison with other surveys

We observed a clear mental health gap between the QUIMHS sample compared to the NSMHW 2020-21 sample. The prevalence of psychological distress, mental disorders and harmful substance use were significantly elevated within the QUIMHS sample compared to within the NSMHW 2020-21 sample. There were approximately double the number of participants experiencing a mental disorder or harmful substance use in the past 12 months within QUIMHS compared to NSMHW 2020-21. There were also elevated rates of both suicidal behaviour and exposure to suicide within QUIMHS. The need for services was greater within the QUIMHS sample. At the national level NSMHW 2020-21 reported that 17.5% of Australians saw a health professional in the last 12 months for their mental health compared to 52.2% of Indigenous Australians within QUIMHS. Amongst those experiencing a mental disorder or harmful substance use in the last 12 months, rates of service utilisation was closer between the two surveys with 41.7% of Australians having seen a health professional for their mental health within NSMHW 2020-21 compared to 66% of Indigenous Australians within QUIMHS. There are several differences in the methods used across these surveys that will explain some of these differences in findings. However, they are unlikely to explain the full extent of disparity between the mental health status and needs of Indigenous Australians within the QUIMHS sample and that of the general Australian population within the NSMHW 2020-21 sample.

QUIMHS reported almost twice as many participants experiencing high/very high psychological distress on the K5 compared to what was estimated by NATSIHS 2018-19 for participants within SEQ. However, this difference does not directly correspond to the difference in the prevalence of mental disorders and harmful substance use between the surveys (had NATSIHS 2018-19 also surveyed mental disorder prevalence), as an additional 29.3% of QUIMHS participants who reported low/moderate psychological distress went on to meet diagnostic criteria for a mental disorder or the threshold for harmful substance use in the past 12 months. Nonetheless, QUIMHS reported a greater number of participants with elevated psychological distress, and there are two possible explanations for this discrepancy. Firstly, it could be due to measurement error within the QUIMHS sample. Unlike the NATSIHS 2018-19, QUIMHS did not use a randomised household sample of participants, with greater reliance on word of mouth and a snow-balling method to recruit participants. Secondly, it could be due to the negative impact of the COVID-19 pandemic on participant's mental health within the QUIMHS sample. There is currently no NATSIHS data collected during the COVID-19 pandemic for comparison against the QUIMHS data.

Overall the QUIMHS findings support the existing literature^{32,33} indicating elevated mental health problems within Indigenous Australian populations compared to non-Indigenous Australians and re-emphasises the inequality within mental health issues faced by Indigenous Australians. It is important to re-affirm here that the contributors to the inequality in mental health outcomes between Indigenous and non-Indigenous Australians are not inherent. There are many social, historical, and economic disadvantages faced by Indigenous Australians which explain the mental health gap between Indigenous and non-Indigenous Australians.^{33,34} Closing this gap requires a holistic approach to mental health, and attention to primary and early intervention strategies that are effective and culturally appropriate.^{35,36}

Considerations and limitations

Scope of survey

QUIMHS was a cross-sectional survey of Indigenous Australians in SEQ aged 18 years and above. Children and youth, although equally important to survey, were outside the scope of this project. Given the cross-sectional design of the survey, we cannot report on the incidence of mental disorders and harmful substance use or draw causal inferences from the findings presented. Where we have investigated the relationship between prevalence and other variables, our findings only represent an association between these variables and do not necessarily establish a causal relationship.

Case definitions and survey instrument

The survey was limited to a subset of mental disorders and harmful substance use which do not represent all mental health issues faced by Indigenous Australian populations within SEQ. Notably, it was outside the scope of this survey to investigate cases of psychosis and bipolar disorder which are believed to be burdensome disorders within Indigenous Australian communities.²⁴

We used the CIDI 3.0 with its corresponding DSM-IV-TR diagnostic classifications to identify cases of mental disorders. It remains the only structured, lay administered, diagnostic instrument successfully utilised within a sample of Indigenous Australian participants in SEQ. The CIDI 3.0 was also used within all iterations of the NSMHW surveys, therefore its use in QUIMHS facilitated the comparison of findings between the two surveys. The next iteration of the CIDI instrument corresponding to DSM 5 classifications is under development. Revisions made between the DSM-IV-TR and DSM 5 included changes to diagnostic criteria for some disorders as well as changes to how disorders are grouped. Further work needs to be undertaken to update QUIMHS estimates to DSM 5 classifications. The CIDI 3.0 was not used to produce diagnoses of substance use disorders within this survey. To limit the length of the survey and response burden on participants, it was replaced with a shorter module containing items which identified occurrences of harmful substance use and established estimates of probable diagnoses. Although the shorter module was constructed using validated measures of substance dependence, the probable diagnoses of substance use disorder, reported as “harmful substance use”, should be interpreted with caution.

Sample size

QUIMHS data collection took place between January and October 2022 while SEQ faced several waves of COVID-19 transmission within the community as well as a significant flooding event. These posed several challenges to participant recruitment activities, limiting our ability to reach potential participants at key times during data collection. Our sample size of 406 participants likely had insufficient power to detect all statistically significant effects within our analyses. Although findings were weighted according to latest census data on the age and sex distribution of Indigenous Australians in SEQ, it is important to acknowledge that some age groups were under-represented within our sample. Specifically, males younger than 40 years and older than 80 years. The 95% bounds of uncertainty around some of our estimates (for instance, variation across age and sex) were large and overlapping and this lack of data needs to be considered while interpreting findings.

Sample representativeness and generalisability of findings

Many epidemiological surveys employ multistage randomised sampling via door knocking to achieve a representative sample of participants. It was not feasible to exclusively sample in this way here, where a household-listing of Indigenous residents in SEQ is not publicly available, and only a relatively small percentage of the population is Indigenous. The QUIMHS sampling strategy employed a mixed-method sampling made up of snowball sampling methods and household door knocking. Most study participants heard about the survey through snowball sampling, which included the project's community engagement efforts and Facebook campaign. This allowed us to capture a proportion of the population not living in a residence, who are typically missed within surveys that rely solely on doorknocking. Approximately 13% of the QUIMHS sample consisted of participants not living in a residence, with elevated prevalence of mental disorder and harmful substance use detected within those participants. Whilst this was an advantage of our sampling strategy, reliance on a snowball sampling method may have also introduced a self-selection bias. Participants who were more likely to identify strongly with the survey topic, be engaged within the community, have access to health services, or feel comfortable speaking about their mental health may have been overrepresented in the sample.

The impact of sampling bias on our results is difficult to quantify, however, to explore this, we conducted a sensitivity analysis to estimate the 'adjusted prevalence' of mental disorder and harmful substance use within the QUIMHS survey. In this analysis our prevalence estimates were weighted by the difference in high/very high psychological distress scores from the NATSIHS 2018-19 survey. The assumption we made was that the higher rates of high/very high levels of psychological distress within QUIMHS compared to NATSIHS 2018-19 was entirely due to measurement error within our sampling strategy. Overall, the prevalence of mental disorders and harmful substance decreased by 7.3% from 45.6% to 38.3% after this adjustment. This indicates that if the above assumption stands true, the limitations to our sampling strategy did not significantly bias our results and do not affect the overall interpretation of findings.

This adjustment is indicative, because not all the differences between QUIMHS and NATSIHS 2018-19 results can be attributed to sampling bias. For instance, NATSIHS 2018-19 data does not reflect the impact of COVID-19, whilst within QUIMHS, results indicated that participants' mental health and service use were associated with variables related to the COVID-19 pandemic. Comparable survey data establishing a pre-COVID-19 baseline does not exist from which we can quantify the change in QUIMHS findings pre and post the beginning of the pandemic.

To date, QUIMHS is the largest diagnostic survey of its kind in this region. As the research is targeted at an urban-residing Indigenous population, findings may have limited applicability to rural and remote-residing Indigenous peoples. The study methods included cultural adaptations, frameworks, and measures that were informed by working closely with Indigenous stakeholders and community members in SEQ. While this is a strength of this research, the methods listed in this paper may not be directly applicable to other Indigenous Australian communities.

Self-reported data

Collecting information through self-report has its own limitations. Participants may be biased when recalling or reporting their own experiences, especially if these were sensitive or upsetting in nature. The QUIMHS survey interviews were performed by Indigenous interviewers trained in community engagement skills and a general understanding of mental health to help build better rapport with participants and help minimize these biases.

Research applications and translation

The QUIMHS survey has provided rich data on the mental health and wellbeing of Indigenous Australians in SEQ, the services they accessed, and barriers they faced in accessing care in the 12 months prior to the survey. This project gathers information directly from members of the community about their mental health and experiences in accessing services, and provides this information back to the Indigenous Australian community of SEQ. To the stakeholders involved in the identification, management, and prevention of mental and substance use disorders, the project provides the opportunity to respond to this information. There are several opportunities for QUIMHS data to inform service planning and delivery, specifically: in identifying groups in the population most in need of mental health services, informing the development of better models of care and care pathways, and addressing common barriers to care faced by Indigenous Australians in SEQ.

There are also opportunities for this data to be used in further research to continue learning about the needs of the community. Application of the QUIMHS data could include: (1) estimating the burden of mental disorders and harmful substance use in SEQ; (2) estimating the prevalence of mental disorder and harmful substance use in other areas outside of SEQ, where it is appropriate to do so; (3) conducting comparative assessments with other Indigenous populations internationally (4) conducting symptom level analyses of mental disorders and harmful substance use; (5) exploring predictors of service use & barriers to care; (6) exploring predictors

of mental disorder and harmful substance use severity; and (7) conducting linkage analyses of QUIMHS data to other health based datasets for participants providing consent to do so.

The methodological framework which delivered the QUIMHS survey can also be applied to future research. This includes: (1) findings from the QUIMHS pilot study which was the first calibration exercise of the survey instrument conducted for Indigenous Australians; (2) the application of the QUIMHS data collection methodology for other large scale mental health surveys involving Indigenous Australian participants; (3) the application of QUIMHS survey instrumentation, resources, and marketing campaign for other relevant mental health initiatives and research; and (4) the application of the QUIMHS training program developed for the interviewers to other mental health initiatives and surveys.

Concluding statement

The QUIMHS survey is the first epidemiological study of its kind conducted at this scale in Australia to report on mental disorders, harmful substance use prevalence and service use within the broader Indigenous Australian community in SEQ. Findings have indicated high rates of mental disorders and harmful substance use faced by Indigenous Australians in SEQ, and important gaps and barriers within the mental health services they accessed. This acquired knowledge opens specific aspects of consideration for service planners and providers to better inform the resourcing and planning for mental health services. This holds potential to create new opportunities to address and reduce the impact of mental and substance use disorders amongst Indigenous Australians in SEQ.

References

1. National Health and Medical Research Council, Values and Ethics: Guidelines for Ethical conduct in Aboriginal and Torres Strait Islander health Research, Canberra. NHMRC Editor, 2018.
2. Australian Institute of Health and Welfare. The Health and Welfare of Australia's Aboriginal and Torres Strait Islander People: An Overview. Canberra: Australian Institute of Health and Welfare, 2011.
3. Lawrence, D., Hancock, K., Kisely, S. The gap in life expectancy from preventable physical illness in psychiatric patients in Western Australia: retrospective analysis of population based registers. British Medical Journal, 2013. 346: p. f2539.
4. Australian Institute of Health and Welfare. Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2018. Canberra: AIHW, 2022.
5. Kessler, R., Abelson, J., Demler, O., Escobar, J., Gibbon, M., Guyer, M. et al. Clinical calibration of DSM-IV diagnoses in the World Mental Health (WMH) version of the World Health Organization (WHO) Composite International Diagnostic Interview (WMH-CIDI). International Journal of Methods in Psychiatric Research, 2004. 13 (2): p. 122-139.
6. Basit, T., Anderson, M., Lindstrom, A., Santomauro, D., Whiteford, H., Ferrari, A. Diagnostic accuracy of the Composite International Diagnostic Interview (CIDI 3.0) in an urban Indigenous Australian sample. Australian & New Zealand Journal of Psychiatry, 2023. 57 (2): p. 283-290.
7. Basit, T., Anderson, M., Lindstrom, A., Arthur, S., Whiteford, H., Ferrari, A. (2022) Adapting data collection processes for a mental health survey in an Urban Indigenous Australian sample. Under review.
8. Queensland Centre for Mental Health Research. QUIMHS Pilot Study Findings report. Brisbane: Queensland Centre for Mental Health Research, 2020.
9. American Psychiatric Association. Task Force on D-I. Diagnostic and statistical manual of mental disorders: DSM-IV-TR. Washington, DC: American Psychiatric Association, 2000.
10. Queensland Government. Inside Out—The Mental Health of Aboriginal and Torres Strait Islander People in Custody Report. Brisbane: Queensland Health, 2009.
11. McNamara, B., Banks, E., Gubhaju, L., Williamson, A., Joshy, G., Raphael, B. et al. Measuring psychological distress in older Aboriginal and Torres Strait Islanders Australians: a comparison of the K-10 and K-5. Australian and New Zealand Journal of Public Health, 2014. 38 (6): p. 567-573.
12. World Health Organization. The World Health Organization World Mental Health Composite International Diagnostic Interview (WHO WMH-CIDI), 2004. Available from: <http://www.hcp.med.harvard.edu/wmhcid/index.php>.

13. World Health Organization. The Alcohol Use Disorders Identification Test, Guidelines for Use in Primary Care. Department of Mental Health and Substance Dependence, 2001.
14. Gossop, M., Dark, S., Griffiths, P., Hando, J., Powis, B., Hall, W. et al. The Severity of Dependence Scale (SDS): psychometric properties of the SDS in English and Australian samples of heroin, cocaine and amphetamine users. *Addiction*, 1995. 90 (5): p. 607-614.
15. Medical Outcomes Trust. The SF-12®: An Even Shorter Health Survey, 2006. Available from: <http://www.sf-36.org/tools/sf12.shtml>.
16. Australian Bureau of Statistics (ABS), The national survey of mental health and well-being. Canberra, Australian Bureau of Statistics, 2022.
17. R Core Team. R: a language and environment for statistical computing. Vienna: R Foundation for Statistical Computing, 2019.
18. Australian Bureau of Statistics (ABS). Find census data. Available from: <https://www.abs.gov.au/census/find-census-data>
19. Australian Bureau of Statistics (ABS). National Survey of Mental Health and Wellbeing: Summary of Results, 2007.
20. Australian Bureau of Statistics (ABS). National Survey of Mental Health and Wellbeing 2020-2021, 2022.
21. Australian Bureau of Statistics (ABS). National Aboriginal and Torres Strait Islander Health Survey 2018-2019, 2019.
22. Australian Bureau of Statistics (ABS). National Survey of Mental Health and Wellbeing methodology, 2022.
23. Australian Bureau of Statistics (ABS). National Aboriginal and Torres Strait Islander Health Survey methodology, 2019.
24. Australian Institute of Health and Welfare. Australian Burden of Disease Study 2018: key findings. Canberra: Australian Institute of Health and Welfare, 2021.
25. Australian Bureau of Statistics (ABS). Mental health and experiences of homelessness, 2014.
26. McIvor, O., Napoleon, A., Dickie, K. Language and Culture as Protective Factors for At-Risk Communities. *Journal of Aboriginal Health*, 2009. 5: p. 6-25.
27. Ferrari, A., Norman, R., Freedman, G., Baxter, A., Pirkis, J., Harris, M. et al. The burden attributable to mental and substance use disorders as risk factors for suicide: findings from the Global Burden of Disease Study, 2010. *PLoS One*, 2014. 9 (4): p. e91936.
28. Degenhardt, L., Charlson, F., Ferrari, A., Santomauro, D., Erskine, H., Mantilla-Herrera, A. et. al. 2018. The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Disease Study, 2016. *The Lancet Psychiatry* 5: p. 987-1012.

29. Australian Institute of Health and Welfare. Deaths by suicide amongst Indigenous Australians. Canberra: Australian Institute of Health and Welfare. Available from: aihw.gov.au/suicide-self-harm-monitoring/data
30. Damian, S., Mantilla Herrera, A., Shadid, J., Zheng, P., Ashbaugh, C., Pigott D. et al. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic, 2021. *The Lancet* 398: p. 1700–1712.
31. Maulik, P., Thornicroft, G., Saxena, S. Roadmap to strengthen global mental health systems to tackle the impact of the COVID-19 pandemic. *International Journal of Mental Health Systems*, 2020. 29 (14): p. 57.
32. Page, I., Ferrari, A., Slade, T., Anderson, M., Santomauro, D., Diminic, S. Estimating the difference in prevalence of common mental disorder diagnoses for Aboriginal and Torres Strait Islander peoples compared to the general Australian population. *Epidemiology and Psychiatric Sciences*, 2022. 21 (31): p. e44.
33. Australian Institute of Health and Welfare. Aboriginal and Torres Strait Islander Health Performance Framework: Access to mental health services. Canberra: Australian Institute of Health and Welfare; 2020.
34. Australian Bureau of Statistics (ABS). National Aboriginal and Torres Strait Islander Health Plan, 2021-2031; 2021.
35. Dingwall, K., Cairney, S. Psychological and cognitive assessment of Indigenous Australians. *Australian & New Zealand Journal of Psychiatry*, 2010. 44 (1): p. 20-30.
36. Berry, S., Crowe, T. A review of engagement of Indigenous Australians within mental health and substance abuse services. *Australian e-Journal for the Advancement of Mental Health*, 2014. 8: p. 16–27.

Appendix A: Participant response and feedback

The QUIMHS research team acknowledges that speaking about mental health, suicide, and past experiences can be inherently challenging. Although safety and risk measures were developed using input and feedback from our Indigenous stakeholders, steering committee and pilot study participants, the QUIMHS research team also wanted to seek feedback directly from participants about the general process and their experience of the survey.

The feedback from participants serves to assist research staff to understand participants' personal and cultural perspectives and to learn about any aspects that may require modification for any future research. Participant feedback was optional, in the form of a 4-item questionnaire. The feedback forms were not linked to any survey results and were recorded and kept separately. The feedback form was offered to the participant via email after the interview.

In total, 30 feedback forms were completed and collected by the end of the survey. Responses to each of the four questions were sorted by theme, summarised in Table A. Some responses were coded across multiple themes.

Table A. Participant feedback summary

Question 1. What was your experience like when you completed the Staying Deadly Survey?		
<i>Number of respondents n = 30</i>	<i>Themes</i>	<i>Example response</i>
29	Positive	"My experience was a positive one. I felt very well informed around what to expect and how I was able to access support if needed through triggers etc. I felt good about sharing my journey to help in the long run."
		"Smooth, respectful and calming"
10	Comfortable	"Brilliant, I felt comfortable while talking about sensitive issues and able to express what I needed without being judged."
		"[The interviewer] made me feel comfortable by yarning to me and building a connection before getting in to the nitty gritty of the survey."
5	Culturally safe	"Easy going and straight forward. No issues at all. Very culturally sensitive and understanding."
		"I felt culturally safe throughout the whole process, thank you."
4	Difficult at times	"It can be difficult at times with some of the more sensitive questions, but having someone like [the interviewer] who comes with an understanding made the process comfortable. The questions were clear and overall I had a positive experience undertaking the survey."
		"It was at times uneasy, but it's also refreshing to help."
4	Long	"The experience was enjoyable a little but long, but [the interviewer] made it fun... so it wasn't drawn out and tedious."
		"It was long, but it was comprehensive"

Question 2. Was there anything about the Staying Deadly Survey that you think should be changed or improved upon?		
<i>Number of respondents n = 30</i>	<i>Themes</i>	<i>Example response</i>
20	No changes	"No - I think it was fine, I had no issues."
		"The way it went worked for me"
3	Repetitive questions	"The repetition of questions is hard to keep engaged with."
		"There were a number of questions that were asked multiple times."
7	Practical suggestions for change	"For a visual person like myself, maybe have the questions there on the screen to read for myself."
		"Some of the options for answers to some of the questions need to be revised. Some perhaps need to be more a yes/no, or perhaps N/A."

Question 3. Do you have any comments about the suitability of the Staying Deadly Survey when talking about mental health with Aboriginal and/or Torres Strait Islander people?		
Number of respondents n = 30	Themes	Example response
8	No comment/issue	"No, all good."
		"No issues at all."
8	Indigenous interviewers and cultural considerations	"It can bring up sensitive memories as expected, so creating a safe and comfortable environment as [the interviewer] has done so, is key."
		"I think it covered a lot of areas that are not fully being addressed in relation to mental health and I felt as though it was a culturally safe process."
6	More of this needed	"I think surveys like this are extremely important and I'd like to see more. I'm glad I could be a part of such important research."
		"I think there should be more of it, it will help."
4	More mental health promotion/services	"We need to speak about mental health just like they've done with COVID. The barriers and stigma need to be broken down."
		"Yes, more money should be put into mental health, there are not enough services for counselling our people."
3	Other suggestions	"The sort of information and time commitment that you are asking of people for this particular survey should have more value on it than just a \$20 voucher or a t-shirt."
		"I think some questions aren't a one size fit all for the answers, but it wasn't bad."

Question 4. Do you have any other comments or feedback?		
<i>Number of respondents n = 30</i>	<i>Themes</i>	<i>Example response</i>
8	No comment/feedback	"No"
10	Good interviewer	"[The interviewer] was caring and compassionate while maintaining a professional approach to the questions being asked. Keep up the great work and thank you for looking into our mob's mental health."
		"[The interviewer] is a deadly surveyor. They need a pay rise!"
8	Contribution to mental health services/support	"I feel good, if my experiences help others that is a positive. Thank you for letting me take part."
		"Hopefully the questions I answered in the survey can help further the improvement around mental health in Aboriginal communities."
6	Other positive feedback	"No, it is a worthwhile survey, and I was happy to participate if it is of any help to our people. It was very challenging for me to re-visit that dark place 22 years ago, but I am all good again knowing how far I have come."
		"Keep up the great work, will definitely encourage others to do it."
1	Other comments	"Even though the follow up email offered a link to support services, it would be more personable to have your team follow up personally."

Overall, participant experiences and responses to the survey were positive. People overwhelmingly reported feeling comfortable and happy to do the survey as a whole. Despite the structured format and standardised CIDI 3.0 questions containing blunt or direct questions about sensitive issues (such as rape and suicide), almost all the feedback indicated that participants reported feeling safe and supported throughout the survey. Only four of the respondents commented about the survey being difficult at times, but all these respondents also reported a positive element, for example: "It was at times uneasy, but it's also refreshing to help." Comments praising the interviewers further bolstered the positive reception and likely provided the scaffolding for participants' favourable experiences. Comments about areas for improvement were phrased in a constructive way, with the most critiques centred on both survey length and repetitive question formats.

The Staying Deadly Survey

The Queensland Urban Indigenous Mental Health Survey
"The Staying Deadly Survey"

QUIMHS Research Team
Queensland Centre for Mental Health Research

QCMHR is a research partnership between Queensland Health and The University of Queensland. Hosted by West Moreton Health, QCMHR is funded to work state-wide in Queensland and contribute to the Australian and global research effort to improve mental health.

July 2023

Designed by Salumi Studio.