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Evidence Check

Intersections between mental health and sexual assault and abuse

An **Evidence Check** rapid review brokered by the Sax Institute for the Mental Health Commission of NSW. December 2019

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This report was prepared by:

Jan Breckenridge, Mailin Suchting, Sara Singh, Georgia Lyons and Natasha Dubler.

December 2019

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Suggested Citation:

Breckenridge J, Suchting M, Singh S, Lyons G, Dubler N. Intersections between mental health and sexual assault and abuse: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for the Mental Health Commission of NSW, 2019.

The intersections between mental health and sexual assault and abuse

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This report was prepared by Jan Breckenridge, Mailin Suchting, Sara Singh, Georgia Lyons and Natasha Dubler.

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Executive summary

Background

The Mental Health Commission of NSW (Mental Health Commission) has been requested through its 2018-2019 Charter Letter from the Minister for Mental Health to undertake work arising from an action in the NSW Government's *NSW Sexual Assault Strategy 2018-2021*: Priority area for action 3. Priority area for action (3) is to "support victims and survivors who have experienced sexual assault to access services that help them feel safe, achieve justice and rebuild their lives". Specifically, the Mental Health Commission has been asked to review the intersections between mental health and sexual assault and abuse.

The Mental Health Commission has commissioned an Evidence Check review in order to understand these intersections. The identified evidence will inform a position paper on steps to respond to and improve mental health outcomes for individuals, families and communities impacted by sexual assault and abuse.

Review questions

Question 1:

What are the intersections between mental health issues and sexual assault and abuse?

Question 2:

What are the key learnings (for mental health, other human or judicial) service delivery and approaches to respond to and improve mental health outcomes for individuals, families, and communities impacted by sexual assault and abuse and help them feel safe, achieve justice and rebuild their lives?

Summary of methods

This review examined peer reviewed and grey literature published in the last 5 years in English which examined the intersections between mental health and sexual assault and abuse. Studies from Australia, New Zealand, the United Kingdom, United States and Canada were included in the review. The search terms covered three broad concept areas: sexual assault and abuse, mental health and trauma, and services and responses. For the purposes of this review, sexual assault and abuse does not include sexual harassment. Thirty peer-reviewed and eight grey literature databases were searched. One hundred and twenty-five publications were included in the review. The evidence was assessed using the Mixed Methods Appraisal Tool (2018) to allow for the inclusion of qualitative studies.

Key findings

Question 1:

A total of 90 publications addressed Review Question 1. Key themes included:

- **Increased risk of a mental illness diagnosis in adulthood associated with childhood sexual abuse:** Studies identified a direct or indirect association between child sexual abuse (CSA) and an increased risk of mental illness diagnosis or symptoms in adulthood. The most common mental illness/symptoms identified were depression, post-traumatic stress disorder (PTSD), suicidality or non-suicidal self-injury (NSSI), anxiety, and psychosis.
- **Increased risk of a specific mental illness diagnosis in adulthood associated with sexual assault and/or sexual abuse in adulthood:** Studies provided evidence of a direct or indirect association between adolescent or adult sexual assault and/or abuse and an increased risk of mental illness diagnosis or

symptoms in adulthood. The most common mental illness/symptoms identified were PTSD, depression, suicidality and NSSI, and anxiety.

- **More likely delays in seeking assistance following sexual assault if the victim has a mental illness:** There was mixed evidence for the relationship between sexual assault and seeking assistance if the victim has a mental health issue. One study provided evidence that victims may delay seeking assistance following sexual assault if they have a mental illness, while another found that experiencing mental illness may increase the likelihood of seeking assistance.
- **Increased risk of sexual assault if a person has a specific mental illness:** None of the studies identified in the review provided evidence to support an association between mental illness and an increased risk of first-time sexual assault and abuse victimisation. Two studies found that revictimization was increased in the presence of post-traumatic stress symptoms (PTSS).
- **Negative responses to disclosure of sexual assault and/or abuse increased risk of mental illness:** Studies provided evidence that negative responses to disclosure increases the risk of mental illness/symptoms for survivors, including PTSD, PTSS and depression.
- **Risk factors for poorer mental health outcomes among survivors included**: feelings of self-blame, shame, receiving negative responses to disclosure, experiencing more severe forms of sexual assault and/or abuse. Protective factors against poor mental health outcomes included post-traumatic growth, trauma-coping self-efficacy, self-compassion, and a stronger sense of cultural identity.[1]

Question 2:

A total of 43 studies addressed Review Question 2. The key themes identified included:

- **Important principles of care or service delivery:** Studies discussed the importance of principles such as gender-sensitive care, continuity of care, recovery principles, person-centred care, empowerment, and trauma-informed care when working with survivors of sexual assault and abuse.
- **Availability of services and supports:** There was evidence to suggest that accessibility of mental health care and support can be associated with increased symptoms of PTSD and depression. Studies identified barriers to service utilisation, including lack of availability of mental health services, health insurance restrictions, and the cost of accessing services.
- **Trauma-informed approaches:** Studies identified important factors in developing trauma-informed models of care, including building strong working relationships between mental health and sexual assault services, staff training and developing a shared understanding of trauma-informed approaches across services. Some studies identified a need for more evidence-based interventions that are trauma-informed.
- **Staffing capabilities and qualifications:** Studies highlighted that staff of sexual assault services should be trained in discussing their client's mental health. Studies also discussed the importance of mental health practitioners being trained in asking clients about sexual assault and abuse.
- **Coordination between sectors and service providers:** Studies found that survivors of sexual assault and abuse suggested that information sharing between services, having practitioners working in the same location, and referrals to appropriate services would be helpful in facilitating their recovery. It was also noted that referral pathways may be limited in rural/remote communities.
- **Holistic approaches to care:** Studies identified that survivors of sexual assault and abuse may experience multiple compounding issues that require a holistic response in the form of trauma-informed care and referrals to appropriate services. This is particularly important for Aboriginal and Torres Strait Islander people and people from culturally and linguistically diverse (CALD) backgrounds, as these groups often experience multiple levels of disadvantage.

[1] The literature included in this review uses the term 'ethnic identity', however 'cultural identity' is the preferred term. As such, 'ethnic identity' has been substituted with 'cultural identity' throughout the report.

- **Types of services or approaches for individuals, families, and communities:** Studies discussed the Child Advocacy Centre model, which delivers multi-disciplinary and trauma-informed services to survivors of childhood sexual abuse. One study suggested the Health Systems Implementation Model could improve service coordination and address barriers to help-seeking experienced by survivors.
- **Circumstances of disclosure of sexual assault and sexual abuse:** Given the evidence of a relationship between negative responses to disclosure and worse mental health outcomes, service providers should offer a supportive environment in which survivors can share their experiences. Service providers should also be aware of the impact of survivors' cultural identity on disclosure.
- **Awareness by service providers of the intersections between mental health and sexual assault and abuse:** Studies identified that clients attending sexual assault referral centres were often already known to mental health services. Studies also found that survivors of childhood sexual abuse were more likely to be known to mental health services.

Gaps in the evidence

There was insufficient evidence to determine if there is an increased risk of sexual assault if a person has a mental illness. This gap may reflect methodological limitations of many of the included studies.

There was a lack of studies examining mental health outcomes among priority population groups across both Question 1 and 2, specifically people with a disability, older people, and refugees. While some studies discussed outcomes for Aboriginal and Torres Strait Islander people and communities this research was also limited. The research relating to CALD populations was all based on United States or Canadian cultural groups highlighting a gap in recent Australian research.

There was limited evidence that examined whether specific service models improved the mental health outcomes of people impacted by sexual assault and abuse.

Implications

This review provided evidence that individuals who have experienced sexual assault and abuse in both childhood, adolescence and adulthood have an increased risk of mental illness and symptoms of mental illness. An increased risk of depression, PTSD, anxiety, suicidality and non-suicidal self-injury was frequently identified among the studies. As such, there is a need for services to address the complex needs of survivors. There is emerging evidence to support integrated and collaborative responses across service systems, which recognises the intersections between sexual assault and abuse and mental health.

Several studies provided evidence of an association between negative responses to disclosure and an increased risk of mental illness among survivors. This points to the need for services providers and the community more broadly to be aware of how to provide effective and helpful responses to disclosure. Service providers should also be aware that disclosure of sexual assault or abuse may not be indicative of their experience of sexual assault and/or abuse and the impacts of this.

The review also provided key learnings in relation to the delivery of services and supports for individuals, families and communities affected by sexual assault and abuse. However, since research tends to focus on the efficacy of specific psychological interventions, there was limited research demonstrating the effectiveness of service models in improving mental health outcomes for survivors. The overall evidence base for priority groups, such as Aboriginal and Torres Strait Islander communities, people from CALD backgrounds, people with a disability, older people, refugees, and people from rural/remote communities was extremely limited. Further research is needed to improve the evidence base of effective models of care.

Conclusion

The evidence identified in this review suggests that people who have experienced sexual assault or sexual abuse are more likely to experience symptoms of mental illness. The review also identified important principles of care or service delivery to support people affected by sexual assault and abuse, including gender-sensitive care, trauma-informed care, and holistic approaches. Given the prevalence of both sexual assault and abuse and mental illness in Australia, it is crucial that service providers are aware of intersections between sexual assault and abuse and mental health to underpin a supportive environment for survivors to share their experiences.

Background

The Minister for Mental Health has requested the Mental Health Commission of NSW (the Mental Health Commission) to undertake work arising from an action in the NSW Government's NSW Sexual Assault Strategy 2018-2021: Priority Area for action 3. Specifically, the Mental Health Commission has been asked to review the intersections between mental health and sexual assault and abuse.

The Sax Institute has engaged the Gendered Violence Research Network (GVRN) UNSW Sydney to conduct an Evidence Check review addressing the intersections between mental health and sexual assault and abuse for the Mental Health Commission. This report provides the detailed evidence review and references.

The aims of the review are as follows:

- To consolidate the available evidence on and discuss the links between mental health and sexual assault and abuse in children, adults, families and communities
- To understand the extent of sexual assault and abuse in NSW including information (if known) on who is affected, and on the prevalence of associated mental health issues
- To consolidate the available evidence on and discuss whether the presence of existing mental health issues can increase vulnerability to sexual assault and abuse in both adults and children
- To understand what improves mental health outcomes for individuals, families and communities impacted by sexual assault and abuse and what factors are associated with poorer outcomes
- To understand what helps victims and survivors who experience mental health issues to access services that help them feel safe, achieve justice and rebuild their lives.

The literature and evidence review provided by the GVRN will be used by the Mental Health Commission in the development of a position paper to be submitted to the Minister for Mental Health. This position paper will outline and contribute to improving mental health outcomes for individuals, families and communities impacted by sexual assault and abuse.

Current context

The high prevalence and substantive impacts of sexual assault and mental illness are experienced globally. The number of sexual assault victims recorded in NSW increased by 4% in 2017-18 (9,847 in 2017 and 10,241 in 2018). Almost one in five sexual assault victims were male (19%), the most common age group for male victims was under ten years of age (25% or 479 victims). There were 8,297 female victims of sexual assault in NSW in 2018, 29% of these women were aged between 15 and 19 years.[1]

Rates of sexual assault in NSW increased considerably in regional and low-population areas. Regions including Moree Plains, Coffs Harbour, Orange and Cessnock report some of the highest rates per 100,000 population, whereas wider Sydney regions such as Ryde, Sutherland Shire, Willoughby and The Hills Shire continually report below-average rates of sexual assault.[2]

Only one in four women perceived the incident of sexual assault as a crime at the time (26%) while two in five perceived it as wrong but not a crime (42%). Almost two-thirds of women experienced anxiety or fear in the 12 months following the incident (57% or 3666, 000).[3]

Sexual violence is frequently under-reported skewing statistical evidence significantly. It is estimated that 2.5 million Australian adults have experienced some form of abuse before the age of 15. This includes 1.4 million adults (7.7%) who experienced childhood sexual abuse.[3] Sexual assault across all age groups disproportionately affects women and girls; the disparity does lessen considerably for older people though

a gendered distinction is still present. Persons with experience of childhood abuse are twice as likely to experience violence later in life (71% compared to 33% for those without experiences of childhood abuse).[3]

In relation to the prevalence of mental illness in Australia, statistics show that in 2017-18, approximately one-fifth (20.1%) of Australians had a mental or behavioural condition, with 13.1% with an anxiety-related condition, and 10.1% with depression or feelings of depression.[4] In 2011, mental and substance use disorders were responsible for 12.1% of the total disease burden in Australia, making it the third highest group behind cancer and cardiovascular diseases.[5] In NSW, 19.1% of people or nearly 1.5 million people experience mental and behavioural health issues.[4] This represents a significant burden on the public health system.

Sexual assault and mental health issues are experienced nationwide. While research in the last five years has started to look far more rigorously at the connection between these experiences, there is no relevant data from peak research institutions and data collection agencies nationally that engages directly with this intersection. Furthermore, significant national data studies on wellness, mental health and assault are often five to ten years old underscoring a knowledge gap which could potentially be addressed through research involving data linkage methodologies. There are several reasons why gathering correlative data is challenging. Any substantial data focusing on this intersection is currently found in grey literature and is primarily qualitative. This effectively means there is a reliance on practice wisdom and victim's self-reporting of the relationship between sexual assault and abuse and mental health concerns. Therefore, determining what is causal or establishing a correlation is not possible. Considering the high prevalence of both sexual assault and mental health issues in the NSW population, it is reasonable to hypothesise an implicit connection in the data and the two should not be taken as inherently separate phenomena.

Most studies included in this review were cross-sectional, as opposed to longitudinal in nature; as such creating a linear connection between mental health and experiences of sexual assault and abuse is difficult. Studies detailing experiences of CSA survivors who experienced sexual 10evictimization in adulthood, for example, showed a higher risk of mental illness symptoms.[6, 7] Multiple instances of assault across the lifespan therefore complicate a linear narrative of incident followed by a mental health issue. These issues complicate attempts to quantitatively map experiences of sexual assault and mental health.

As noted previously, this review found that studies conducted on mental health typically determine mental wellbeing through participant self-reporting, validated tests employed by researchers and/or acknowledgement of symptoms by the participant. It was rare for clinical diagnoses to be conducted within the study or that evidence was provided in the study design about previous mental health diagnoses according to a recognised diagnostic tool such as DSM-5. For Review Question 1 in this Evidence Check review, mental illness is defined as a symptom or symptoms contributing to a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (DSM–5) or a DSM-5 diagnosis. The diagnosis may not therefore correspond to a formal diagnosis by a mental health practitioner.

Terminology

Sexual assault

The term sexual assault is applied broadly and can apply to any offence of a sexual nature against adults or children. It is an act of coercion in which one does not give consent or cannot give consent.

The NSW Sexual Assault Strategy 2018-2021 (the Strategy) defines sexual assault as a 'continuum of attitudes and actions' rather than a single aggressive act.[8] This definition encompasses a wide range of sexual acts and acknowledges an escalation scale from sexual harassment, sexual touching, sexual assault and aggravated sexual assault.

Aligned with this scale, the Strategy also defines sexual assault as any form of penetration of the vagina, anus or mouth with another person's body part or object without consent.

Child sexual abuse

While the definition in the Strategy is intended to include child sexual abuse (CSA) a more detailed definition is useful. CSA is the act of exposing or engaging a child in sexual activity. In NSW the age of consent is 16 years, and consent is not a valid defence for sexual offences made toward children under the age of 16.

The RoyaL Commission into Child Sexual Assault[9] defines CSA as:

> 'Any act which exposes a child to, or involves a child in, sexual processes beyond his or her understanding or contrary to accepted community standards. Sexually abusive behaviours can include the fondling of genitals, masturbation, oral sex, vaginal or anal penetration by a penis, finger or any other object, fondling of breasts, voyeurism, exhibitionism, and exposing the child to or involving the child in pornography. It includes child grooming, which refers to actions deliberately undertaken with the aim of befriending and establishing an emotional connection with a child, to lower the child's inhibitions in preparation for sexual activity with the child.'

It should be noted that the resources identified for inclusion in this review reflect a similar range of definitions and that there may be differences between jurisdictional legal and clinical practice-based definitions of sexual assault used to identify the experience of study participants, also reflected in the literature sourced.

Mental health and mental illness

The definitional distinction between 'mental health' and 'mental illness' is generally unclear and the two terms are often applied interchangeably when referring to mental wellbeing.

In *Living Well: A Strategic Plan for Mental Health in NSW 2014 – 2024* (the Plan) the Mental Health Commission emphasises the improvement of the mental health and wellbeing of our community with concern for ensuring that those with moderate to severe mental illness are supported to remain well in communities and to lead in their own recovery. The term 'mental health' is not defined in the Plan however 'mental illness' is defined as:

> '…many dimensions of human social and psychological experience, including relatively common and distressing disorders such as depression and anxiety. However, many of the Plan's references to mental illness relate to conditions that are often the most severe, persistent and disabling – including schizophrenia and bipolar disorder. Cognitive disorders, such as Alzheimer's disease and other dementias, and developmental disabilities, such as attention deficit hyperactivity disorder (ADHD) or autism spectrum disorders, are generally not within the scope of the Plan except where they are also linked to a higher risk of psychological distress or mental illness'.[10]

For Review Question 1 in this Evidence Check review, mental illness is defined as a symptom or symptoms contributing to a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (DSM–5) or a DSM5 diagnosis. In the reviewed publications, a mental health symptom is often self-described by study participants or decided by a proxy indicator assigned by researchers. The diagnosis may not therefore correspond to a formal diagnosis by a mental health practitioner.

Priority Populations

While experiences of sexual assault and abuse and mental illness are present in all communities and population sub-groups in NSW, particular groups are more vulnerable to the impacts and require targeted responses from health and other services. The majority of sexual assault, child abuse and neglect victims are women and children.[11, 12] Women are also more likely than their male counterparts to exhibit lifelong mental and behavioural problems.[11]

The priority population groups for this review were identified both in advance and by locating trends in the literature. These groups include: Aboriginal and Torres Strait Islander people, people who identify as lesbian, gay, bisexual, transgender, intersex, queer (or questioning) (LGBTIQ+) people (non-homogenous group), people from culturally and linguistically diverse (CALD) backgrounds, refugees, older people, people with a disability (cognitive, physical and/or intellectual) and people in contact with the criminal justice system (CJS). A recurring trend in literature, particularly in the US, identified military sexual assault and mental health issues as a prominent and largely under-reported phenomenon. There was a lack of research undertaken within the last 5 years around mental health and sexual assault and abuse for the following priority populations. Where priority populations were included as a group in the literature it is reflected in the Evidence Check review. Where statistics were available for mental health and sexual assault and abuse, they are included below however some statistics do not differentiate between types of assault and abuse (and therefore may include violence).

Aboriginal and Torres Strait Islander People

Aboriginal and Torres Strait Islander people are disproportionately affected in relation to both mental illness and sexual assault and abuse. In NSW, 1 in 20 Aboriginal and Torres Strait Islander people are receiving clinical mental health care, comparatively 1 in 100 of the general population receiving clinical mental health care.[13] Over 1 in 3 Aboriginal and Torres Strait Islander women have been the victim of assault by a partner in their lifetime.[11] According to the ABS Recorded Crime – Victims statistics the rate of sexual assault victimisation for Aboriginal and Torres Strait Islander persons in NSW between 2017-2018 was 293 victims per 100,000 Aboriginal and Torres Strait Islander persons. This represents 702 victims. Over half of the victims were aged between 10 and 19 years.[1]

LGBTIQ+ people (considering gender and sexuality)

Significant research conducted internationally and nationally shows that sexually and gender diverse people are more likely to experience mental illness than heterosexual people. An estimated 41.1% of homosexual or bisexual people over the age of 16 showed symptoms of a mental disorder in the previous 12 months[14] and 57.2% of transgender and gender diverse people over the age of 18 have received a diagnosis of depression in their lifetime.[15]

People who identify as LGBTIQ+ experience intimate partner violence at similar rates as those who identify as heterosexual.[16] A survey of over 27,000 gender minority people in the United States found that 47% of respondents had a lifetime history of sexual assault. This rate was higher for those who identified as nonbinary (55%).[17]

Some of the terminology used in this report is directly taken from that used in the literature. This means that terms such as sexual minority and gender minority are used which are not generally accepted as contemporary language in Australia.

People from culturally and linguistically diverse backgrounds

For women born in non-English speaking countries, 9% have experienced sexual violence (including threats and assault) since the age of 15, this amounts to 198,700 women.[3] Nearly a quarter of people who arrived

in Australia between 1996-2007 report affective disorders and 17.1% experience anxiety disorders. A disproportionately high percentage when compared to the national average.[14]

CALD populations included in this review may not comparable to the Australian population. The statistics above show prevalence of sexual assault and abuse and reflect the necessity for further research.

Refugees

No significant statistics were found in relation to refugees. Data collected is often framed through time or location of arrival for immigrants and rarely sub-categorises this group by reason for migration.

Older People

In NSW 2,943 calls were made to elder abuse helplines between 2017-18. Nearly three quarters of these calls were attributable to family and domestic violence and victims were disproportionately females over the age of 75. Sexual abuse accounted for a little less than 5% of the calls with emotional abuse as the primary allegation.[12] Generally, the prevalence of mental health disorders decreases with age, across all age groups women experience higher rates of mental disorders than men. Anxiety disorders are the most commonly reported mental health issue for people aged 75-85 in a 12-month period.[14]

People with a disability (physical and/or cognitive)

Nationally, 2% or 55,000 women with a disability or long-term health condition have experienced sexual assault in the previous 12 months.[3] Fewer than 1% of men with a disability or long-term health condition have experienced sexual assault in the previous 12 months.[3] Between August 2015 and October 2018, the NSW Ombudsman received 358 contacts relating to alleged abuse and neglect of adults with disability living in community settings, over 10% of these reports included allegations of sexual abuse.[18] More than half (57.9%) of all people with a profound or severe disability reported a mental or behavioural condition in 2017-18. This occurs at a rate of more than four times that of people with no disability or long-term health condition (13.7%).[4]

People in contact with the criminal justice system

Research undertaken for the Australian Institute of Health and Welfare (AIHW) found that 40% of prison entrants had a previous mental health disorder diagnosis.[19] People who have a mental illness are three to nine times more likely to enter prison than those who do not have a mental illness.[20]

Methods

The review focuses on two primary questions with related sub-questions specified by the Mental Health Commission for investigation and analysis. The questions addressed aims 1, 3, 4, and 5. Aim 2 is addressed in the Introduction and specifies prevalence and response to sexual assault and childhood sexual abuse (see pages 8-12).

The primary review questions are:

1. What are the intersections between mental health issues and sexual assault and abuse? (Aims 1 and 3)
2. What are the key learnings for (mental health, other human or judicial) service delivery and approaches to respond to and improve mental health outcomes for individuals, families, and communities impacted by sexual assault and abuse and help them feel safe, achieve justice and rebuild their lives? (Aims 4 and 5)

The methodology implemented for this review was designed in consultation with the Mental Health Commission and Sax Institute and has been rigorously applied and is consistent with the usual process of an Evidence Check review. As noted previously, for the purposes of this review, sexual assault and abuse did not include sexual harassment. A search strategy identified the available evidence to address the two primary review questions. The GVRN team provided an assessment on the quality of evidence and chose to use the Mixed Methods Appraisal Tool (MMAT) (2018) to widen the option of including qualitative studies.

The time period for this review is the last 5 years and there have been policy initiatives and political activism over the last 5-10 years which contribute to specific patterns of publishing including:

- The Royal Commission into Institutional Responses to Child Sexual Abuse
- Human Rights Commission Inquiries into Sexual Assault perpetrated in the Australian Defence Forces and responses within and external to the Military
- A National Survey and activism relating to sexual assault on University campuses.

The evidence identified in this review reflects these major policy initiatives although it would also be the case that university students are frequently used in research as they are an easy convenience sample to capture. This emphasis reflects the growing recognition of the importance of tailored responses to sexual assault and abuse perpetrated in institutional settings and the relative lack of evidence informing such responses.

Appendix 1 provides detailed information of the review design, implementation and quality assessment.

Search Strategy

Database Selection

Database searches were limited to Keyword, Abstract, Title and/or Topic searches as the preliminary 'full-text' searches initially conducted by the GVRN team returned a vast number of extraneous results. Appendix 1 documents the nature of the searches run within each database based on the types of searches each database allows for outside of 'full-text' searches.

The databases searched were: Informit: APAIS (ATSIS and Health), APAFT (Australian Public Affairs Full Text), ATSIHealth, FAMILY (Australian Family & Society Abstracts), Families & Society Collection, CINCH (Australian Criminology Database), CINCH-Health, Health Collection, Health & Society, Health Collection; Proquest: ERIC, NCJRS (National Criminal Justice Reference Service Abstracts Database), PAIS Index, Policy

Index File, ProQuest Central; Ovid: PsycARTICLES, PsycINFO, PsycBOOKS, PsycEXTRA, EBM Reviews, Social Work Abstracts; Ovid MEDLINE: MEDLINE; EBSCO: Violence & Abuse Abstracts, Women's Studies International, CINAHL, Family & Society Studies Worldwide, Family Studies Abstracts, MEDLINE; Psychiatry Online; PubMed.

Grey-literature databases searched: Australian Institute of Family Studies (AIFS) Library; Australia's National Research Organisation for Women's Safety (ANROWS); NZ Family Violence Clearinghouse; Royal Commission into Institutional Responses to Child Sexual Abuse; ACON; Australian Indigenous HealthInfoNet; Australian Institute of Health and Welfare (AIHW); and, National LGBTI Health Alliance.

Search Terms

Appendix 1, Table 1 provides detail of the specific search terms and the use of wildcard truncations linkages via Boolean search terms. The following broad concept areas were used to respond to the primary research and sub-questions:

- **Concept Area 1:** sexual assault/abuse
- **Concept Area 2:** mental health/trauma
- **Concept Area 3:** services/responses.

A search of academic and grey literature databases was conducted in accordance with the search strategy just outlined. Due to the excessive volume of extraneous results that the searches in some of the proposed databases returned, certain aspects of the search strategy were amended to allow for a more manageable number of search results directly focusing the primary review questions (see Appendix 1 for further detail).

Inclusion and Exclusion Criteria

Inclusion

Appendix 1 outlines the ways in which the team managed inclusion. To be included, publications had to meet the following criteria:

1. Evidence from AU, NZ, UK, USA, Canada
2. Published within the last 5 years (>=August 2014)
3. Published in English
4. Research/evidence type – the review includes empirical research, systematic/rapid evidence/scoping reviews, metanalyses as well as other relevant grey literature.

Exclusion

1. Evidence related to sexual harassment
2. Evidence related to technology facilitated abuse/revenge pornography
3. Evidence related to perpetrators of sexual assault/abuse
4. Evidence related to sex trafficking
5. Evidence related to child exploitation material
6. Publications that do not disaggregate evidence on sexual assault and/or abuse from evidence on trauma more broadly (e.g. where a publication examines childhood trauma generally but does not specifically examine or report on childhood sexual assault and/or abuse) or childhood physical abuse and neglect.

Search results and screening

After accounting for the amendments detailed in Appendix 1, the search across all of the databases included in the review produced a total of 5635 results.

First stage of screening

The titles, abstracts and keywords of these 5635 publications were screened by two researchers for their relevance to review. Duplicates were removed (n=238) leaving 5397 records to be reviewed.

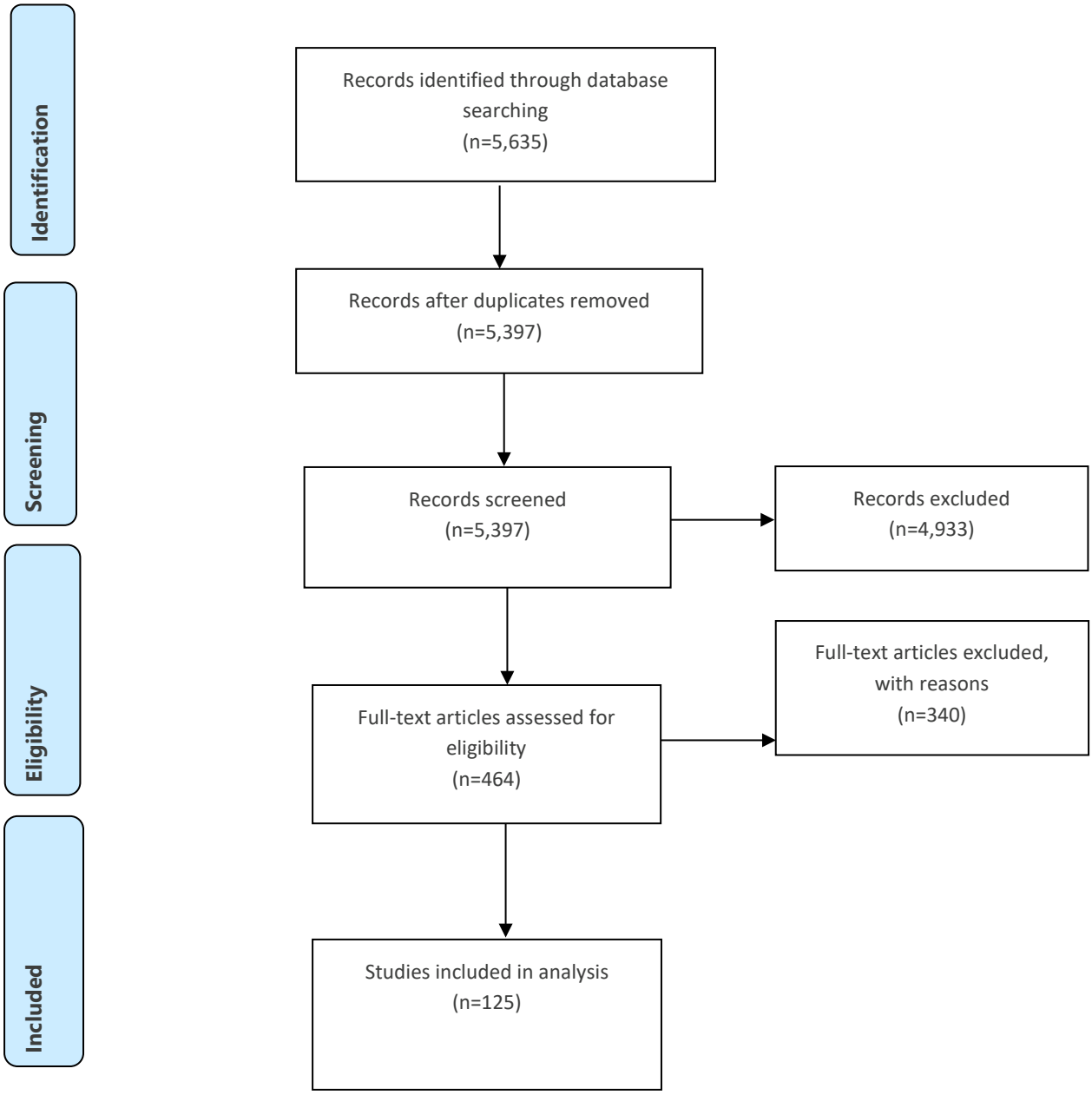
Publications that fell within the exclusion criteria specified in the original and amended search strategy were excluded at this stage (n=4933). This initial screening process resulted in **464 publications** being retrieved for potential inclusion in the review.

Second stage of screening

These 464 publications were then subjected to a second stage screening. As part of this stage, the full text of each publication was screened for relevance to the review. The screening criteria differed depending on whether the publication had been retrieved on the basis of potentially addressing Review Question 1, or whether it had been retrieved on the basis of potentially addressing Review Question 2.

After screening for Question 1, publications presenting the intersection between sexual assault and abuse and mental health as the **main focus** (i.e. the article was totally focused on the intersection) were included. After screening for Question 2, publications providing key learnings for service delivery and approaches to respond to and improve mental health outcomes with both **main and partial focused** articles (i.e. publication was totally or partially focused on key learnings) were included. **The total number of resources included in this review is 125.**

Figure 1. Prisma diagram



Total Number of resources for Review Question 1=90

Total Number of resources for Review Question 2=43 (Note: 8 resources were used for both questions and are effectively counted as duplicates). Comprehensive tables detailing each study are included in Appendices 2 and 3.

Publications were assessed using the MMAT, version 2018[21], summarised in tables[2], and themes developed from the analysis of these publications relating to the sub-questions posed by the Mental Health Commission included for discussion, as well as an analysis of evidence gaps.

Assessing the quality of evidence

The Mixed Methods Appraisal Tool (MMAT) (2018) is a critical appraisal tool specifically designed to facilitate inclusion of a wider range of research designs and allows appraisal of the methodological quality of five categories of studies: qualitative research, randomized controlled trials, non-randomized studies, quantitative descriptive studies, and mixed methods studies. The MMAT is not able to be used for non-empirical papers such as reviews and theoretical papers however the GVRN team did include meta-analyses and systematic reviews where a detailed methodology of the included studies was available.

In line with implementation recommendations, two reviewers were independently responsible in the appraisal process. All decisions were discussed with the wider research team to ensure consistency and provide methodological expertise where required. Each article was appraised in relation to 5 core areas specific to the category of study ensuring that like methodologies were appraised according to the same set of criteria.

The MMAT discourages any attempt to calculate an overall score from the ratings of each criterion. Instead, it is recommended to provide detail of the appraisal against all resources and present overall appraisal by category. Appendix 4 contains the overall appraisals by category. The publication tables in Annexure 1 will be provided as a separate document and includes details of the specific rankings for each of the five relevant criteria by article.

Limitations

Publication patterns in both areas of sexual assault and mental health reflect siloing of research outputs and there were only 125 publications that explicitly focused on the intersections of each area able to address the two primary review questions. While the review methodology was properly applied, it is important to note that there may be a disjuncture between what is published in peer reviewed journals (accepted to be high quality in evidence reviews) which meet the agreed inclusion criteria as opposed to practice-based research available via websites, repositories or in books/book chapters (frequently not considered to be high quality or unable to be assessed as such) – referred to as 'grey literature'. An unintended consequence of publication patterns being that 'practice wisdom' of the intersections and best practice responses may not be written about in refereed journal articles able to be identified or retrieved by an evidence review.

[2] Tables will provide information on each publication's setting, sample, aims, and results/outcomes.

Findings

Question 1

What are the intersections between mental health issues and sexual assault and abuse?

A total of 90 publications included in this review addressed Review Question 1. Approximately half of these publications examined adolescent or adult sexual assault only (n=44; 48.9%), whilst slightly less than a fifth examined CSA only (n=16; 17.8%). The remaining 30 publications (33.3%) either examined both CSA and adolescent/adult sexual assault or did not clearly state whether one or both forms of sexual assault and abuse were being examined.

It is worth noting that most of the publications that addressed Review Question 1 did not base their assessment of mental illness on clinical diagnoses, but instead used validated scales to assess symptoms of mental illness or self-identified symptoms consistent with a specific diagnosis.

The analysis of publications identified a number of findings relevant to the themes identified in the terms of the review, as well as additional findings that related to themes not identified in the terms of the review.

The themes are not mutually exclusive, with a number of publications falling under more than one theme. Where population groups have been mentioned in a study, they have been highlighted.

Appendix 2 will provide more detailed information on the relevant findings made by each study.

Table 1. Review Question 1 sources by themes (n=90)

Review Question 1: key themes	Number of sources from Review Question 1 N (%)
Themes identified in the terms of the review	
Theme 1: Increased risk of a mental illness diagnosis in adulthood associated with childhood sexual abuse	22 (24.4)
Theme 2: Increased risk of a specific mental illness diagnosis in adulthood associated with sexual assault and/or sexual abuse in adulthood	48 (53.3)
Theme 3: More likely delays in seeking assistance following sexual assault if the victim has a mental illness	2 (2.2)
Theme 4: Increased risk of sexual assault if person has a specific mental illness	2 (2.2)
Theme 5: Negative responses to disclosure of sexual assault abuse increase risk of mental illness	10 (11.1)
Additional themes identified	
Theme 6: Increased risk of mental illness diagnosis in adulthood is associated with sexual assault and/or abuse generally	23 (25.6)
Theme 7: Increased risk of mental illness diagnosis in adolescence is associated with CSA	3 (3.3)
Theme 8: Increased risk of mental illness diagnosis in adolescence is associated with sexual assault and/or abuse generally	2 (2.2)
Theme 9: Other intersections are present between mental health issues and sexual assault and abuse	6 (6.7)

Table 2. Review Question 1 sources (n=90) by themes and areas of interest identified

	Number of sources from Review Question 1 N (%)								
	Theme 1	**Theme 2**	**Theme 3**	**Theme 4**	**Theme 5**	**Theme 6**	**Theme 7**	**Theme 8**	**Theme 9**
Nature and circumstances of sexual assault and/or abuse									
Repeated victimisation examined	8 (8.9)	8 (8.9)	0 (0.0)	2 (2.2)	3 (3.3)	9 (10.0)	1 (1.1)	0 (0.0)	0 (0.0)
Period of abuse reported	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Age of assault mentioned	3 (3.3)	0 (0.0)	0 (0.0)	1 (1.1)	1 (1.1)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)
Examined assault/abuse in an institutional context	2 (2.2)	13 (14.4)	0 (0.0)	0 (0.0)	0 (0.0)	6 (6.7)	0 (0.0)	0 (0.0)	1 (1.1)
Examined assault/abuse in a familial context	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.1)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)

Examined assault/abuse in a domestic context	1 (1.1)	3 (3.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)
Drug or alcohol issue mentioned[3]	4 (4.4)	9 (10.0)	1 (1.1)	1 (1.1)	1 (1.1)	9 (10.0)	0 (0.0)	1 (1.1)	5 (5.6)
Sample location									
Urban	7 (7.8)	9 (10.0)	1 (1.1)	1 (1.1)	5 (5.6)	6 (6.7)	2 (2.2)	0 (0.0)	1 (1.1)
Regional	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Remote	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Thematic findings relating to identified priority population groups were made									
LGBTIQ+ people	1 (1.1)	4 (4.4)	0 (0.0)	0 (0.0)	1 (1.1)	3 (3.3)	0 (0.0)	0 (0.0)	1 (1.1)
Older people	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
CALD populations	2 (2.2)	6 (6.7)	1 (1.1)	0 (0.0)	1 (1.1)	3 (3.3)	0 (0.0)	0 (0.0)	1 (1.1)
People with a disability	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
People in contact with the CJS	1 (1.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.1)	1 (1.1)	2 (2.2)	0 (0.0)

[3] This includes studies that reported on drug/alcohol issues/use for the sample, or which identified drug/alcohol issue/use as an outcome, mediator or moderator. It does not include studies that examined drinking at the time of assault (e.g. substance-facilitated sexual assault/abuse), or studies that report on family history of drug/alcohol issues.

Theme 1: Increased risk of a mental illness diagnosis in adulthood associated with childhood sexual abuse

Out of the 90 publications that addressed Review Question 1, 22 (24.4%) provided evidence of a direct or indirect association between CSA and an increased risk of mental illness diagnosis orsymptoms in adulthood. The most common mental illness that these studies identified was depression (n=13)[22-34], followed by post-traumatic stress disorder (PTSD) (n=8)[6, 27, 29, 31, 35-38], suicidality or non-suicidal self-injury (NSSI) (n=6) and anxiety (n=5), psychosis (n=3)[22, 33, 39], mood disorders generally (n=1)[22], and psychiatric disorders or mental disorder symptoms generally (n=2).[25, 33]

Risk and protective factors

Three studies highlighted how greater feelings of self-blame or shame can increase the risk of individuals with a history of CSA experiencing PTSD[36], anxiety[30], depression[30], and suicidal ideation.[24] However, the relationship between guilt and mental illness symptoms was less clear. Whilst one study found that male military personnel and veterans are at an increased risk of experiencing PTSD and depressive symptoms due to greater feelings guilt[31], another study found that in a clinical sample of women, experiencing shame, but not guilt, was related to more frequent suicidal thoughts amongst women with a history of CSA.[24] Other trauma-related emotions, such as anger, sadness, disgust and fear have also been found to be associated with greater PTSD severity amongst adult CSA survivors.[35]

Sexual revictimisation in adulthood was also found to increase the risk of CSA survivors experiencing mental illness symptoms.[6, 7] In Creech and Orchowski's[6] study of women veterans receiving primary care at a hospital, women who had experienced both CSA and military sexual assault, had more severe post-traumatic stress symptoms (PTSS) than women who had experienced military sexual assault but not CSA. Similarly, Lamis et al.'s[7] study of African American women from low socioeconomic backgrounds found that CSA was associated with an increased risk of experiencing intimate partner sexual coercion, which was in turn associated with a greater likelihood of suicidal ideation.[7]

Several protective factors against symptoms of mental illness in adulthood for CSA survivors were also identified. These include post-traumatic growth (PTG)[30], social support[23], existential wellbeing (i.e. having a greater sense of purpose in life)[40] and having children[34]. The last factor only had a protective effect for women, but not for men[34]. Other factors that were also found to influence the relationship between CSA and mental illness symptoms include age[38], gender[22], age at which CSA occurred[22], negative responses from family members and relatives to disclosure[33] substance use[29], derealisation[35], and dissociation.[39]

Priority population groups

Four of the studies contributing to this theme included relevant findings in relation to one or more of the priority populations groups identified in the terms of the review.[7, 29, 38, 41] One study examined the association between CSA and mental illness among **sexual minority (gay/bisexual/transgender) men.**[38] It found that sexual minority men who were older (i.e. ≥30 years old) were at an increased risk of experiencing PTSD or panic disorders than sexual minority men who were younger.[38] However, the latter group was significantly more likely to engage in alcohol intoxication.[38]

Two studies identified relationships between CSA and symptoms of mental illness in **CALD populations** (i.e. African Americans and Latinas).[7, 29] For example, Ulibarri et al.'s[29] study of Latina women in San Diego, United States, found that CSA was associated with more depressive and PTSD symptoms, and greater substance use. Substance use mediated the relationship between CSA and PTSD symptoms, such that women who had a history of CSA were more likely to engage in substance use, which in turn, was associated with greater PTSD symptoms.[29]

One study examined a sample of **women in jail** and found that women who had experienced CSA were at an increased likelihood of lifetime suicide attempts than women who had not experienced CSA.[41]

Theme 2: Increased risk of a specific mental illness diagnosis in adulthood associated with sexual assault and/or sexual abuse in adulthood

Forty-eight studies (53.3%) provided evidence of a direct or indirect association between adolescent/adult sexual assault/abuse and an increased risk of mental illness diagnosis/symptoms in adulthood. PTSD (n=29)[6, 7, 27, 31, 37, 42-64] was the most common mental illness identified in these studies. This was followed by depression (n=23)[26, 27, 29, 31, 42, 44, 46, 49, 50, 53, 57, 59, 62-72], suicidality and NSSI (n=10)[46, 56, 57, 71, 73-78], and anxiety (n=7).[31, 42, 59, 64, 66, 67] Associations between adolescent/adult sexual assault/abuse and eating disorders (n=2)[64, 79], psychosis (n=1)[64], and somatic disorders (n=1)[66] were also found.

Risk and protective factors

Similar to the findings relating to the previous theme, feelings of self-blame or shame amongst individuals who had experienced adolescent/adult sexual assault/abuse was associated with an increased risk of mental illness (n=9), and in particular, PTSD[44, 45, 50, 51, 54, 55, 57], depression[44, 57, 65], and suicidality.[57, 78]

Receiving negative responses to disclosure was also identified by 7 studies as being related with symptoms of mental illness.[44, 45, 49, 54, 60, 61, 65] This finding is discussed in further detail below.

Six studies highlighted how more severe forms of adolescent/adult sexual assault/abuse may be associated with worse mental health outcomes.[47, 52, 54, 69, 75] For example, Peter-Hagene and Ullman[54] found that women who had experienced high-violence or alcohol-related sexual assault had more severe PTSD symptoms than women who experienced moderate severity sexual assault. The effects of high-betrayal sexual assault (i.e. sexual assault by a close other) was examined in Gomez[75], who found that individuals who had experienced adolescent high-betrayal adolescent sexual assault, reported greater depersonalisation, which in turn predicted NSSI. Du Mont et al. (2019)[47] also examined how relationship to perpetrator affects mental illness symptoms, and found that in a sample of women who had experienced sexual assault, women who knew the perpetrator were more than 3 times more likely to experience PTSS than women who did not know the perpetrator.

Four studies examined how rape acknowledgement affects symptoms of mental illness amongst individuals who had experienced adolescent/adult sexual assault.[42, 63, 66, 72] Whilst one of these studies did not find any significant differences in the mental illness symptoms of acknowledged and unacknowledged sexual assault survivors[66], the other three studies identified rape acknowledgement as a risk factor for such symptoms.[42, 63, 72] Anderson et al.[42] examined a sample of racially diverse, sexual and gender minority young adults, and found that rape acknowledgement was related to greater symptoms of anxiety, depression and PTSD. Wilson et al.'s[63] study of female survivors of rape found a significant interaction between sexism, rape acknowledgement and symptoms of mental illness, such that amongst individuals who were low in benevolent sexism (but not amongst individuals who were high in benevolent sexism), rape acknowledgement was associated with increased depressive and PTSD symptoms.

Hostile sexism did not have a significant effect on the relationship between rape acknowledgement and mental illness symptoms.[63] The effect of sexism was also examined by Wilson and Scarpa.[80] Contrary to the findings of Wilson et al.[63], they found that male survivors of rape who endorsed higher levels of hostile sexism and lower levels of benevolent sexism had greater PTSD symptoms. This difference in findings of the effect of hostile sexism may be explained by the gender differences in samples and the gender of the

perpetrators involved. As Wilson and Scarpa[80] note, hostile sexism may be a risk factor for mental illness symptoms in men who have experienced sexual assault by a woman, as men with negative perceptions of women may be at a greater risk of experiencing psychological distress following victimisation.[80]

Other factors that were found to influence the relationship between adolescent/adult sexual assault and symptoms of mental illness in adulthood include prior sexual victimisation[74], maladaptive coping[50, 61], negative cognitions about oneself[43, 78], experiential avoidance (e.g. supressing thoughts/feelings)[65], experiencing other forms of trauma[47], subscribing to masculinity norms[48], depersonalisation[75], dissociation[76], feelings of hostility[76], substance/alcohol use[29, 74], perceptions of institutional betrayal[71], beliefs that power and sex and connected[58], poorer physical health[78], rape myth acceptance[72], and a lower sense of competency and autonomy.[68]

Several studies also highlighted protective factors against mental illness symptoms in adulthood among adolescent/adult sexual assault survivors. These include, greater trauma-coping self-efficacy[45], self-compassion[50], and a stronger sense of cultural identity.[53]

Priority population groups

Nine studies (10.0%) included relevant findings in relation to one or more of the priority population groups. The majority of these studies (n=6) explored associations between adolescent/adult sexual assault/abuse and mental illness diagnosis/symptoms in **CALD populations** (i.e. African Americans, Latinas, Canadian Aboriginal people, and other minority cultural groups).[7, 29, 47, 53, 57, 69] Some of these studies highlighted complex relationships between culture and survivors' mental health outcomes.

For example, one study found that a greater sense of cultural identity was a protective factor against PTSD amongst women who had received negative responses to their first disclosure of sexual assault victimisation, but not amongst women who had not received such negative responses.[53] In Du Mont et al.'s[47] Canadian study of women who had experienced sexual assault in the past year, White women were at a higher risk of experiencing PTSD symptoms than women from an Aboriginal or minority cultural/racial background. However, the authors of that study note that this finding should be interpreted with caution due to sampling and other issues.[47]

One study examined both **CALD and sexual and gender minority populations**. In Gomez and Freyd[69], minority status individuals (i.e. identifying as a racial or cultural minority, Muslim, foreign national, gay, lesbian or bisexual) who experienced sexual violence by a fellow minority group member, were at an increased risk of experiencing depression, sleep disturbance and sexual abuse sequelae. The risk of mental illness symptoms in **sexual and/or gender minority groups** was examined more closely in three studies.[42, 66, 77] Two of these studies focused on rape acknowledgement. Anderson et al.[42] found that amongst non-binary individuals, rape acknowledgement was related to greater depressive symptoms.[42] However, in Blayney et al.'s[66] study of sexual minority women, no significant effect of rape acknowledgement status on mental illness symptoms was found. The third study that focused on sexual and/or gender minority groups, found that in a sample of veterans seeking Multisystemic (MST)-related treatment, individuals who identified as a sexual or gender minority were more likely to attempt suicide than those who did not identify as such.[77]

Theme 3: More likely delays in seeking assistance following sexual assault if the victim has a mental illness

One study (1.1%) provided evidence that victims with mental illness may delay seeking assistance following sexual assault[81] In Manning et al.'s[81] study of adults who attended a sexual assault centre for a forensic medical examination, clients who reported a pre-existing mental health complaint (i.e. pre-existing mental health condition, current medication prescription for a mental health condition, previous self-harm or suicide attempt), tended to present to the centre later than those without a pre-existing mental health complaint. More specifically, 54.1% of clients with a pre-existing mental health complaint presented more than 24 hours after sexual assault, compared to 32.1% of clients without a pre-existing mental health complaint.[81]

It is also worth noting that one study found that experiencing symptoms of mental illness may affect the *likelihood* of seeking assistance.[82] In Kirkner et al.'s[82] study of women who had experienced sexual assault, women with more severe PTSD symptoms were more likely to seek mental health treatment. However, women with both PTSD and alcohol issues were less likely to seek substance use treatment.[82] That study also examined the **effect of race** on mental health help seeking, and found that White women survivors of sexual assault were more likely to seek treatment from mental health services than African American women survivors of sexual assault.[82]

Theme 4: Increased risk of sexual assault if person has a specific mental illness

None of the studies that addressed Review Question 1 provided evidence to support an association between mental illness and an increased risk of first-time sexual assault/abuse victimisation. However, 2 studies (2.2%) found that the risk of sexual assault/abuse revictimisation was increased in the presence of PTSS. Both of these studies found that PTSS mediated the relationship between CSA and adult sexual assault, such that individuals who had experienced CSA, experienced greater PTSS, which in turn was associated with an increased risk of experiencing adult sexual assault.[36, 37] Neither of these studies made findings relevant to the priority population groups identified in the terms of the review.

Theme 5: Negative responses to disclosure of sexual assault abuse increases risk of mental illness

Ten studies (11.1%) examined the effect of responses to disclosure on victims'/survivors' mental health.[26, 33, 44, 49, 53, 54, 60, 61, 65] Eight of these studies found an association between disclosure responses and PTSS/PTSD[26, 44, 45, 49, 53, 54, 60, 61], 5 identified an association between disclosure responses and depression[26, 33, 44, 49, 53, 65] and 1 identified associations between disclosure responses and suicidality, self-harm, anxiety, psychosis and eating disorders.[33]

These studies provided evidence on how negative responses to disclosure increases the risk of symptoms of mental illness in victims and survivors. For example, in a study by Rees et al. (2019)[33] on how family responses to disclosure of sexual assault/abuse affects the mental illness symptoms of women throughout their lives, being ignored or not believed, being blamed, and being threatened by family members or relatives following disclosure were associated with the onset of mental disorder symptoms. The study also presented 2 vignettes on the associations between CSA and short-term and long-term mental health-related outcomes. These vignettes revealed how negative responses from family members or relatives to disclosure of CSA can lead to the onset of issues in adolescence, such as self-harm, suicidality, and eating disorders, as well as issues in adulthood, such as depression, panic disorder, and psychosis.[33] The association between negative responses to disclosure and mental illness symptoms was further highlighted in several other studies that identified how factors such as assault-related shame[33, 44, 45, 65], avoidance[65], and

lower levels of trauma-coping self-efficacy[45], can mediate the relationship between negative responses to disclosure and adverse mental health outcomes.

It is worth noting that one study in the review found that positive reactions to disclosure was also related to greater PTSD and depression symptoms, with this relationship weakening over the course of time.[26] The authors of that study highlight how this finding does not necessarily suggest that positive reactions to disclosure cause greater mental illness symptomatology, but may be explained by the fact that victims may disclose to multiple individuals, causing a co-occurrence of both negative and positive responses that may be difficult to separate.[26]

Priority population groups

Two studies included relevant findings in relation to the identified priority population groups. One study focused on women survivors of sexual assault and found that **bisexual women** received less social support than heterosexual women, which in turn, was associated with greater depressive symptoms.[26] The other study identified how a **stronger sense of cultural identity** may act as a protective factor against PTSD amongst women who have received negative responses following sexual assault disclosure.[53]

Theme 6: Increased risk of mental illness diagnosis in adulthood is associated with sexual assault/abuse generally

A number of studies examined CSA and adolescent/adult sexual assault/abuse together or did not clearly state whether one or both forms of sexual assault/abuse were being examined. Of these studies, 23 (25.6%) provided evidence that sexual assault/abuse may be associated with an increased risk of mental illness diagnosis/symptoms in adulthood. The most common mental illness identified in these studies was PTSD (n=14)[6, 26, 27, 31, 37, 83-91], followed by depression (n=9)[26, 27, 31, 85, 86, 90, 92-94], suicidality or NSSI (n=6)[7, 62, 73, 74, 86, 93] and anxiety (n=4).[83, 85, 86, 93] Some of these studies also identified psychosis (n=2)[93, 95], eating disorders (n=2)[85, 86], bipolar disorder (n=2)[85, 86], neurotic disorders (n=1)[93], and psychiatric disorders generally (n=1).[96]

Risk and protective factors

Sexual revictimisation was identified as risk factor for greater mental illness symptoms.[i] For example, Sigurvinsdottir and Ullman's[26] longitudinal study of women survivors of sexual assault found that women who experienced sexual revictimisation during the study period had greater depressive symptoms. In Gilmore et al.'s[74] study of women who had received a sexual assault forensic examination, women who reported both prescription opioid use and prior sexual assault victimisation were found to be at an increased risk of experiencing suicidal ideation.

Consistent with findings in earlier themes, more severe sexual assault/abuse was also associated with an increased risk of mental illness symptoms.[86, 93] For example, in Dworkin et al.'s[86] meta-analysis of research on the association between sexual assault victimisation and psychopathology, the effects of sexual assault victimisation on psychopathology was found to be greater in samples where there were more sexual assaults involving weapons or physical injury. However, contrary to some of the findings in Theme 2 on how having a perpetrator that was known to the victim can increase the risk of adverse mental health outcomes, the meta-analysis also found that sexual assault victimisation had a greater effect on psychopathology in studies that used samples with more assaults involving stranger perpetrators.[86]

Other factors that were identified as affecting the association between sexual assault/abuse generally and mental health outcomes in adulthood include feeling disgust[83], engaging in counterfactual thinking (i.e. thinking about how things could have been worse or better)[84], substance use[87], receiving negative and

positive reactions to disclosure[26], mental contamination (i.e. feeling dirty or contaminated in the absence of physical contact)[89], difficulties tolerating negative emotions[89] and institutional betrayal.[90]

Greater social support[26, 87, 88] and perceived self-efficacy were identified as protective factors against mental illness symptoms.[96]

Priority population groups

Six studies made relevant findings in relation to one or more of the priority population groups. Three of these studies found associations between sexual assault/abuse generally and symptoms of mental illness in **CALD populations** (i.e. African Americans).[7, 27, 91] For example, Walsh et al.'s[91] study of urban-dwelling African Americans found that individuals who had experienced sexual violence were1.6 times more likely to have lifetime PTSD than those who had not experienced sexual violence.

Sigurvinsdottir and Ullman's[27] longitudinal study of women survivors of sexual assault examined the interactions between **race and sexual orientation** and found that Black bisexual women consistently had the highest levels of PTSD symptoms. This was followed by non-Black bisexual women, and heterosexual women respectively.[27] The effect of **sexual minority status** on psychological outcomes was examined more closely in Smith et al.'s[90] study of university students. In that study, institutional betrayal partially mediated the relationship between identifying as lesbian, gay or bisexual (LGB) and greater PTSD and depressive symptoms, such that students who identified as LGB, were more likely to report institutional betrayal leading up to or after sexual assault, which was in turn associated with greater mental illness symptoms.[90]

The potential for individuals of sexual minority status to be an at increased risk of experiencing mental illness symptoms following sexual assault was also highlighted in Sigurvinsdottir and Ullman's[26] study of women survivors of sexual assault. That study found that **bisexual women survivors** received less social support than heterosexual women survivors, which in turn was associated with greater depressive symptoms.[26]

One study examined a sample of **individuals in prison** and found that those who had experienced sexual victimisation were over 4 times more likely to have "probable psychosis".[95]

Theme 7: Increased risk of mental illness diagnosis in adolescence is associated with CSA

Three studies (3.3%) found evidence that CSA is associated with an increased risk of mental illness diagnosis/symptoms in adolescence.[33, 97, 98] One study examined a sample of adolescents seeking treatment for sexual abuse and found that adolescents with greater emotion regulation difficulties had more PTSD and depressive symptoms. Another study focused on **adolescent girls involved in the juvenile justice system**, and found that CSA history increased the likelihood of lifetime suicide attempts and NSSI.[98]

The final study presented two vignettes of the temporal associations between the lifetime experiences of sexual abuse/assault of women adult survivors and mental disorder.[33] These vignettes revealed how receiving negative responses from relatives and family members following disclosure of CSA, can lead to the onset of mental illness symptoms, such as self-harm and suicidality, as well as mental disorders, such as eating disorders, in adolescence.[33]

Theme 8: Increased risk of mental illness diagnosis in adolescence is associated with sexual assault/abuse generally

As previously noted, a number of studies examined CSA and adolescent sexual assault/abuse together or did not clearly state where one or both forms of sexual assault/abuse were being examined. Of these studies, 2 (2.2%) identified an association between sexual assault/abuse and an increased risk of mental

illness diagnosis/symptoms in adolescence. Both of these studies focused on **youth involved in the juvenile justice system**. In one study, sexual abuse victimisation was found to be related to greater PTSS and self-injury, with the association between sexual abuse and self-injury being stronger for girls than for boys.[99] In the other study, youth who had experienced sexual abuse had greater PTSD symptoms. This, in turn was associated with greater drug and alcohol use.[100]

Theme 9: Other intersections between mental health issues and sexual assault/abuse

Six studies (6.7%) did not directly or indirectly address the themes identified above.[101-106] One study looked at the relationship between daily PTSD symptoms and alcohol use amongst women survivors of rape, and found that women who reported greater PTSD symptoms on a given day, experienced more intense negative affect (i.e. negative emotions) on that day, which in turn, was associated with greater same-day alcohol consumption and desire to drink.[102] This association was stronger for women with an alcohol use disorder.[102]

Another study examined the prevalence of mental illness symptoms in a sample of adult that attended a sexual assault centre.[103] Whilst it not possible to determine the directionality of the association between sexual assault victimisation and mental illness in that study, the study did reveal a high prevalence of mental illness among adults attending the centre, with 36% having severe to moderate depression, 30% having severe to moderate anxiety, and 45% reporting a history of self-harm.[103] Over a quarter (28%) were also engaging in hazardous drinking, whilst slightly over a tenth reporting moderate to severe drug use issues.[103]

The co-occurrence of sexual violence victimisation and mental illness symptoms amongst youth was also examined in Nelon et al.[105] Similar to the study by Brooker et al.[103], it was not possible to definitively determine the directionality of the associations between sexual assault victimisation and mental illness in this study. However, it did highlight how youths of **sexual (lesbian, gay or bisexual) or racial (Asian, African American or Latino) minority status** may be at a higher risk of experiencing co-occurring sexual victimisation, substance use, and mental illness (e.g. depression, suicidal ideation) than youth who are not of sexual or racial minority status.[103]

Kintzle et al.[106] examined the rates of military sexual trauma, PTSD and mental health care use in a sample of women veterans. Although that study did not establish the directionality of the association between sexual trauma and mental health outcomes in that sample, it did find that of the 35% of the sample that had probable PTSD, more than three-quarters had experienced military sexual trauma.

The remaining two studies examined rates of and/or factors associated with sexual assault/abuse in psychiatric patient samples. In Agyapong et al.'s[101] study of psychiatric outpatients, a range of factors was identified as increasing the likelihood of patients having a history of CSA. This included being female, having attained a high school education at most, having previously been known to psychiatric services, having a family history of mental illness, and having a history of substance use. Kmett and Eack[104] found that in a sample of 1,136 psychiatric inpatients, 45% had a history of sexual assault.

Similar to the findings by Agyapong et al.[101], certain sociodemographic and clinical factors were found to increase the likelihood of patients having a history of sexual assault. This included being Caucasian, being female, having been married, having children, having a current diagnosis for depression, becoming a psychiatric inpatient through voluntary as opposed to involuntary admission, and having a prior psychiatric hospitalisation. Compared to patients without a history of sexual assault, patients who had experienced sexual assault also had lower overall functioning, greater psychiatric symptoms, and a greater proportion of mental health professionals in their social network. It is important to note that in both these studies, it was

not possible to determine whether the presence of mental illness had increased patients' risk of sexual assault, or whether sexual assault had led to greater mental illness symptoms amongst patients. These studies do, however, highlight how many individuals in contact with psychiatric services may be living with intersecting issues relating to both mental illness and sexual trauma.

Question 2

What are the key learnings for (mental health, other human or judicial) service delivery and other approaches to:

- Respond to and improve mental health outcomes for individuals, families and communities impacted by sexual assault and abuse; and
- Help them feel safe, achieve justice and rebuild their lives?

A total of 43 studies met the inclusion criteria for Review Question 2. These studies provided a range of key learnings for service delivery and approaches to improve mental health outcomes for individuals, families, and communities impacted by sexual assault and abuse. A summary of these key learnings is provided below (see Appendix Three section for a full list of studies under each theme).

Table 2. Review Question 2 sources by key learnings (n=43)

Review Question 2: Key learnings	Number of sources from Review Question 2 N (%)
Key Learning 1: Important principles of care or service delivery (including, but not limited to, mental health services)	21 (48.8)
Key Learning 2: Availability (timing, location) or services and supports	12 (27.9)
Key Learning 3: Trauma-informed approaches	12 (27.9)
Key Learning 4: Staffing capabilities and qualifications	14 (32.6)
Key Learning 5: Coordination between sectors and service providers	10 (23.2)
Key Learning 6: Holistic approaches to care	5 (11.6)
Key Learning 7: Types of services for individuals, community and/or family (not just mental health services)	8 (18.6)
Key Learning 8: Circumstances of disclosure of sexual assault and abuse	10 (23.2)
Key Learning 9: Awareness by service/care providers of intersections between mental health and sexual assault and abuse	5 (11.6)

Table 3. Review Question 2: Key learnings and priority areas identified in the terms of the review

	Number of sources from Review Question 2 N (%)								
	Important principles of care or service delivery	**Availability of services or supports**	**Trauma-informed approaches**	**Staffing capabilities and qualifications**	**Coordination between sectors and service-providers**	**Holistic approaches to care**	**Types of services or approaches for individuals, communities and families (not just mental health)**	**Circumstances of disclosure**	**Awareness by service providers of the intersections between mental health and sexual assault/abuse**
Priority populations									
Aboriginal and Torres Strait Islander people	0 (0.0)	2 (4.7)	2 (4.7)	1 (2.3)	2 (4.7)	1 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)
LGBTIQ+ people	0 (0.0)	1 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
People from CALD backgrounds	2 (4.7)	2 (4.7)	1 (2.3)	1 (2.3)	1 (2.3)	0 (0.0)	0 (0.0)	3 (7.0)	0 (0.0)
Refugees	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
People with a disability	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Older people	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

Rural, regional or remote communities	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Settings									
Health and human service environments[4]	15 (34.9)	10 (23.3)	10 (23.3)	13 (30.2)	9 (20.9)	5 (11.6)	5 (11.6)	3 (7.0)	3 (7.0)
Out of home care	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.3)	0 (0.0)	0 (0.0)
Aged care	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Educational	1 (2.3)	1 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (9.3)	0 (0.0)
Judicial	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.3)	0 (0.0)	1 (2.3)	0 (0.0)	1 (2.3)
Military	4 (9.3)	2 (4.7)	2 (4.7)	0 (0.0)	0 (0.0)	0 (0.0)	1 (2.3)	1 (2.3)	1 (2.3)
Unclear	1 (2.3)	0 (0.0)	0 (0.0)	1 (2.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)

[4] This includes general medical practice and mental health, as well as multidisciplinary teams that delivery health-related services such as Child Advocacy Centres and Sexual Assault Referral Centres.

Key learning 1: Important principles of care or service delivery

Of the studies, 48.8% (n=21) in the sample provided insight into principles of care or service delivery when working with people who have been affected by sexual assault or sexual abuse. These principles include gender-sensitive care, continuity of care, recovery principles, person-centred or patient-centred practice, empowerment, and trauma-informed care. Given the prominence of trauma-informed care in the recent literature on sexual assault and sexual abuse and mental health, trauma-informed care as a principle of service delivery is discussed in a separate section below.

Gender-sensitive care

Gender-sensitive care was discussed in 11.6% of the studies (n=5). Dognin, Sedlander, Jay and Ades (2017)[107] argue that the longstanding physical and psychological impacts of sexual violence necessitates gender-sensitive medical care, but these impacts also serve as a barrier to accessing services. Common medical procedures, particularly those related to gynaecological care, can trigger PTSD symptoms and feelings of shame and discomfort among survivors of sexual assault and sexual abuse.[108] In a sample of female military veterans, a history of sexual assault was significantly associated with PTSD symptoms, however only a minority of participants reported receiving immediate care after the incident.[106] The authors suggest that gender-related concerns regarding perceived lack of support from a male-dominated institution and discomfort with male service providers may act as a barrier to mental health help-seeking after sexual assault.

In a sample of primary care providers from a Veterans Affairs health clinic, participants identified several barriers to their delivery of gender-sensitive care. These included there not being enough time in the appointment for patients to disclose their trauma histories, providers not feeling proficient in providing gender-sensitive care, and patient distrust of services.[108] Kehle-Forbes et al. (2017)[109] provide a number of suggestions for improving gender-sensitive care for women who have experienced sexual violence. These include women-only treatment settings or support groups and training of medical professionals in delivering gender-sensitive care.

Continuity of care

Long-term services that are tailored to meet the individual needs of victims and survivors of sexual assault and sexual abuse have been identified as crucial to recovery.[110] Furthermore, survivors and their families may be retraumatised by services if they are required to recount their experiences to multiple service providers.[110, 111] 9.3% of the studies (n=4) discussed continuity of care as necessary for survivors to feel safe and supported. In a study conducted by Monteith et al. (2018)[112], 22% of female survivors of sexual assault expressed concern regarding continuity of care. A high turnover of healthcare providers impacted the quality of care they received and had negative impacts on mental health, as survivors were required to explain their trauma multiple times. Another study also identified a high turnover of therapists as a barrier to help-seeking.[113]

Quadara et al. (2017)[110] conducted qualitative interviews with adult survivors of institutional CSA and highlighted suggestions for future service provision to improve continuity of care, including online and telephone support and low-cost services that can be accessed on a long-term basis rather than short-term mental health care plans. Continuity of care could also be addressed through effective record-keeping and information sharing between service providers with the survivors' consent, to ensure that survivors are not required to recount their experiences to multiple providers.

Person-centred, strengths-based and empowerment approaches

Mental health services have increasingly become 'recovery-oriented', acknowledging that trauma arising from sexual violence is prevalent among mental health service users. This overarching approach includes principles such as person-centred care, in which services are individualised to meet the survivor's needs, and attention is paid to their strengths, culture, and visions of recovery.[114] Strauss Swanson and Schroepfer (2018)[115] interviewed nine mental health practitioners to examine how practitioners dealt with client disclosures of sexual assault and abuse. They reported utilising strategies to provide support to their clients, including focusing on strengths, staying attuned to their client's needs, and encouraging the client to guide the conversation at their own pace. Empowerment approaches which are strengths-based, solution-focused and emphasise resilience to trauma were also discussed in some of the studies.[116] Survivors articulated the importance of empowerment approaches in supporting their recovery, whereby counsellors believed their story, took their story seriously, and assured them that the sexual violence was not their fault.[117]

Key Learning 2: Availability of services and supports

Key learnings regarding the availability of services and support were discussed in 27.9% of the studies (n=12). This is an important area for consideration, as there is evidence to suggest that perceived barriers to accessing mental healthcare can be associated with increased symptoms of PTSD and depression.[118] Two studies discussed the difficulties sexual assault workers can experience in referring clients to mental health services, including a lack of mental health services available after hours and a lack of clear referral pathways.[119, 120] From the perspective of survivors and their caregivers, a lack of availability of mental health services, health insurance restrictions, and the cost of accessing such services are barriers to service utilisation.[111]

Moreover, there is some evidence of an association between availability of services and improved mental health outcomes among people who have experienced sexual assault. Eisenberg, Lust, Hannan and Porta (2016)[121] examined the associations between the availability of sexual violence resources on college campuses and the emotional wellbeing of female students who had experienced sexual assault. Resources included staff dedicated to addressing sexual violence issues, 24-hour support hotlines, a safe walk or escort service, activities to raise awareness of sexual violence, and support groups for survivors of sexual violence. It was found that if a college had less sexual violence resources, survivors were significantly more likely to experience symptoms of anxiety, panic attacks and PTSD. As sexual assault on university campuses is a pressing issue, how services and supports can be tailored to meet the mental health needs of survivors could be considered in future research.

In relation to priority populations, Quadara et al. (2017)[110] identified a need for services which cater to people from **CALD backgrounds** and the **LGBTIQ+ community**, as these communities have unique needs and may be susceptible to adverse mental health outcomes. Moreover, Grealy et al. (2017)[116] conducted interviews with practitioners working with survivors of sexual abuse and discussed the impact of funding cuts on the delivery of services. They concluded that more services were needed in **rural and remote communities**, particularly for **Aboriginal and Torres Strait Islander communities**, as services in these areas are most susceptible to funding cuts.

Key Learning 3: Trauma-informed approaches

Of the studies, 27.9% (n=12) discussed trauma-informed approaches for working with survivors of sexual assault and sexual abuse. Such approaches seek to create safety for survivors by acknowledging the interconnected nature of trauma with mental health and behaviour.[114] Given the complex issues that

survivors of sexual assault and sexual abuse may face, trauma-informed care requires service providers to work collaboratively and provide referrals which meet the needs of the individual survivor. Trauma-informed care was most commonly discussed in the context of health care settings, including general medical practice, hospitals, mental health services, and veteran's health services.

A study conducted by Hegarty et al. (2017)[122] examined how trauma-informed systems of care can be incorporated into mental health and sexual violence services. The authors interviewed clinicians from public hospitals, sexual assault centres, and mental health services to identify factors that are important in the delivery of trauma-informed care for women who have experienced sexual violence and symptoms of mental illness. The participants identified a number of factors that they considered important in developing trauma-informed models of care: building strong relationships between mental health and sexual assault services, providing staff with training on trauma-informed care, developing a shared understanding and language of trauma-informed care across services, incorporating trauma-informed care into all levels of service, and strong leadership and governance.[122]

Tarzia, Novy, Forsdike and Hegaarty (2017a)[123] also conducted a study on the incorporation of trauma-informed care in mental health and sexual assault services, but instead included participants with a lived experience of sexual violence and mental illness. Similar to the findings of Hegarty et al. (2017)[122], the integration of mental health and sexual assault services and the incorporation of trauma-informed approaches into all types of care were identified as key to the women's recovery. Moreover, the women emphasised the importance of accessibility of trauma-informed services, and for those services to provide referrals and support if the woman was facing complex issues.[123]

Despite the widespread coverage of trauma-informed care in the literature on mental health and sexual assault and sexual abuse, further research is needed regarding evidence-based interventions that incorporate trauma-informed approaches. Quadara (2015)[114] conducted a review of the literature on trauma-informed approaches to improve service delivery for sexual assault survivors who also experienced adverse mental health outcomes. Hegarty, Tarzia, Hooker, and Taft (2016)[124] conducted a similar literature review of interventions to support recovery from sexual violence. Both studies concluded that there was a lack of rigorous evaluation of trauma-informed interventions for sexual violence.

Key Learning 4: Staffing capabilities and qualifications

The staffing capabilities and qualifications needed to support recovery from mental illness among survivors of sexual assault and sexual abuse was discussed in 32.6% of the studies (n=14). In particular, the training needs of service providers who work with survivors was a strong theme across these studies. In a sample of practitioners working with men who experienced sexual abuse, sexual abuse training and direct therapeutic experience were considered the most important factors for effective service delivery.[125] A lack of training in responding to disclosures of sexual assault or sexual abuse can impact the quality of service provided by mental health practitioners.[115] It is therefore important that practitioners develop skills and resilience in responding to disclosure of sexual assault and abuse, and also have access to supportive resources for their own self-care.

In a study of mental health services in the UK, 7% reported having a strategy in place that addresses the needs of sexual assault survivors, and 32% reported training their staff in assessing trauma experienced by their clients, including sexual assault and sexual abuse.[126] Furthermore, the rates at which mental health practitioners reported asking their clients about potential childhood sexual abuse or sexual assault histories varied considerably, ranging from 37%[127] to 100%.[120]

Given the intersection between sexual assault and mental health outcomes, staff of sexual assault services should be trained in discussing their client's mental health history.[120] This included conducting suicide risk

assessments and ensuring they are referred to the appropriate services.[128] Equally, mental health staff should also be trained in asking clients about experiences of sexual abuse and sexual assault.[129] In a USA study, Wherry, Huey, and Medford (2015)[130] surveyed child advocacy centre practitioners about their training needs, which were ranked as follows: 1) understanding which treatments are effective; 2) recognising symptoms; 3) understanding which measures are helpful in diagnosing symptoms; 4) how to take care of oneself after hearing about abuse children experience; 5) making referrals to clinicians. Clinicians have also expressed a need for training in gender-sensitive care and trauma-informed care.[108]

Key Learning 5: Coordination between sectors and service providers

The importance of referral pathways between sexual assault services and mental health services and coordination between service providers was discussed in 23.2% of the studies (n=10). Tarzia, Fooks, Forsdike, Fernbacher, and Hegarty (2017b)[131] argue that effective coordination between services is necessary for trauma-informed care. However, bureaucratic, rule-oriented and fragmented service systems can impede survivor's access to care.[110] Referral pathways and service availability may also be limited in rural and remote communities. In Brooker et al.'s (2019)[126] study of mental health services in the UK, only 16% reported having a formal referral pathway with a sexual assault service. Similarly, sexual assault referral centres in the UK reported difficulties in referring their clients to mental health services due to a lack of referral pathways and a lack of partnerships between sexual assault and mental health services.[119] In an Australian study, clinicians from public hospitals, sexual assault centres, and mental health services identified a need for improved service integration and coordination of internal and external referrals.[122]

Tarzia et al. (2017a)[123] conducted qualitative interviews with 33 women who experienced sexual assault to examine their experiences in accessing mental health and sexual violence services. Participants highlighted that better integration between mental health and sexual violence services, such as information sharing and having practitioners working in the same location, would be helpful in facilitating their recovery. Furthermore, participants stated that they wanted to feel part of a supportive network of services, and they wanted services to provide referrals rather than having to seek out services themselves.[123]

Drawing upon interviews with health practitioners, Tarzia et al. (2017b)[132] concluded that strengthening communication and integration between services is fundamental to providing trauma-informed care and improving outcomes for people affected by sexual assault and sexual abuse. Practical suggestions included the sharing of case notes, providing staff with clear roles and responsibilities, flow charts for clinical care, and clear guidelines for referrals. Hegarty et al. (2017)[122] acknowledged the barriers to enacting change within the health system, but nevertheless provided suggestions for service planning and connections between existing services and to improve continuity of care and trauma-informed care. This included relationship building between teams, a shared understanding of roles and language, integrated care and coordination of referrals, staff training, leadership and governance to create a culture of sensitive practice from the ground up, and improved information systems for monitoring and evaluation.

Key Learning 6: Holistic approaches to care

Of the studies, 11.6% (n=5) discussed holistic approaches to care. Holistic models of support attend to the full range of survivors' needs, rather than just pathologizing their mental health symptoms.[116] Based on the philosophy of holistic healing, service providers are responsible for creating environments that are conducive to recovery by providing survivors with autonomy, self-determination and respect.[133] However, from their consultations with women with a lived experience of mental illness and sexual violence, Tarzia et al. (2017a)[123] concluded that a holistic service model was often lacking adequate health services. Consultations with service providers have highlighted the challenges they face in supporting women with multiple compounding issues, such as family violence and drug and alcohol problems.[131] Understanding

these co-occurring effects is particularly important, as there is some evidence to suggest that survivors with co-occurring symptoms of mental illness, such as PTSD symptoms, and alcohol use are less likely to seek treatment and support.[82] Additionally, Aboriginal and Torres Strait Islander women or women from CALD backgrounds often experience structural forms of oppression and marginalisation. To provide a holistic service, practitioners identified the importance of being able to easily access trauma-informed services, share information, provide referrals and help women in accessing services for their complex issues.[122]

Key Learning 7: Types of services or approaches for individuals, communities and families

Specific types of services or approaches for individuals, communities and families impacted by sexual assault and abuse were considered in 18.6% of the studies (n=8). Criminal justice and child protection systems have been described as confusing and distressing by survivors, and the length of time spent waiting to go to court can exacerbate their mental health symptoms.[134] A study conducted by Powell, Westera, Goodman-Delahunty, and Pichler (2016)[135] found that criminal justice professionals often neglected the mental health needs of survivors', which can have a negative impact on the prosecution's case and can also exacerbate survivors' psychological distress. As such, The Child Advocacy Centre (CAC) model was developed in response to failures of traditional law enforcement and child protection practices in working with survivors of childhood sexual abuse. The CAC model uses a multi-disciplinary team to deliver key services, including psychological support and trauma-informed care, to survivors in a child-friendly environment.[136, 137] A systematic review of the literature on the CAC model identified that while the model resulted in better criminal justice outcomes and greater satisfaction with the criminal justice process, no studies directly addressed the impact of the CAC model on child trauma outcomes.[136] While the model shows some promise in improving outcomes for survivors of childhood sexual abuse, more rigorous evaluation of the model is needed.

Hegarty et al. (2017)[122]conducted a large-scale study of how to promote a trauma-informed model of care within mental health and sexual violence services. They incorporated the perspectives of women with a lived experience of mental health problems and sexual violence and practitioner insight to develop the Health Systems Implementation Model. The model, which can be used alongside existing health and violence service frameworks, comprises of four key elements: 1) relationship building within and between services; 2) integrated coordinated care; 3) reflexive monitoring; 4) regular environment and workplace scans of services. Such an approach could address the barriers to help-seeking already identified and enhance the provision of trauma-informed care within the health system.

In relation to priority populations, Quadara and Hunter[133] discuss how important principles of care and service delivery, including trauma-informed care, can be implemented in residential care settings. **Therapeutic residential care programs** aim to provide a safe and healing environment for young people, responding to the complex impacts of abuse and neglect, including sexual abuse (McLean, Price-Robertson and Robinson, 2011 in Quadara and Hunter (2016). Additionally, the authors discuss programs specific to **Aboriginal and Torres Strait Islander communities**. For example, Aboriginal and Torres Strait Islander healing programs, which emerged in the context the ongoing impacts of colonisation, can assist communities in recovering from the psychological impacts of trauma, including sexual abuse and sexual assault. The programs are strengths based as they recognise that healing is underpinned by a strong cultural and spiritual base.[133]

Key Learning 8: Circumstances of disclosure of sexual assault and sexual abuse

It is important that service providers understand the circumstances of disclosure of sexual assault and sexual abuse, and how supportive reactions to disclosure can facilitate recovery for survivors. 23.2% of the studies

(n=10) discussed disclosure, and four of these studies examined the association between disclosure and mental health outcomes. Individuals may be reluctant to disclose or report sexual assault that has occurred in institutional settings, such as the military.[138] Moreover, there is some evidence that negative reactions to disclosure can be associated with greater symptoms of depression[44, 49, 65], and PTSD.[44, 49] As such, it is crucial that service providers offer a supportive environment in which survivors can share their experiences, as well as assist survivors in cultivating relationships with people who are supportive of their recovery. There is also evidence that assault-related shame can mediate the relationship between sexual assault and mental health outcomes, in that more shame was associated with greater mental distress.[44, 65, 139] As such, assault-related shame could be a target of therapeutic intervention.

Some studies investigated disclosure of sexual assault or sexual abuse among **CALD survivors**, which has important implications for service providers working in a cross-cultural context. Koo, Nguyen, Andrasik, and George (2015)[140] examined cultural factors related to disclosure of sexual assault in a sample of Asian American college women and found that barriers to disclosure included cultural stigma regarding mental health support seeking and fears that their personal relationships, especially relationships with parents, would be adversely affected by disclosure. Service providers should be aware that disclosure of sexual assault can be influenced by the survivor's sociocultural context, and individualistic Western conceptualisations of health may not resonate with all survivors.[140] In another study of college women from **diverse cultural backgrounds** who experienced sexual victimisation[53], a greater sense of cultural identity was found to be a protective factor against symptoms of PTSD for women who had experienced negative responses to disclosure. As such, service providers should consider the cultural identity of survivor's as a possible protective mechanism against negative reactions to disclosure. Practitioners must also develop cultural competence to support survivors in overcoming barriers to help-seeking.[141]

Key Learning 9: Awareness by service and care providers of the intersections between mental health and sexual assault and sexual abuse

Of the studies, 11.6% (n=5) highlighted the importance of service providers being aware of the intersections between mental health and sexual assault and sexual abuse. Manning et al. (2019)[81] analysed the client notes of a sexual assault referral centre in the UK and found that 68.9% of adult clients had reported a pre-existing mental illness. In a similar study conducted by Brooker & Durmaz (2015)[119] Forty percent of the clients attending a sexual assault referral centre were already known to mental health services. Guha et al. (2019)[22] examined the forensic medical records of childhood sexual abuse survivors and linked these records to medical data. They found that survivors of childhood sexual abuse had significantly increased levels of attendance at psychiatrists, psychologists and clinical social workers compared to a matched comparison sample who had not experienced sexual abuse. Given these intersections, sexual assault services should routinely conduct mental health assessments with their clients. Furthermore, Powell et al. (2016)[135] argue that the criminal justice should pay more attention to the mental health needs of survivors of childhood sexual abuse by understanding how trauma can impact their re-telling of the experience and offering survivors alternative methods of giving evidence at trial.

Gaps in the evidence

As with all evidence reviews, inclusion of relevant articles is determined by the specified inclusion criteria, time period for investigation and specific patterns of publishing reflecting the major policy initiatives and political activism over the last 5-10 years. An obvious example being, the 5-year period for inclusion of studies in this review contributed to a clear theme of trauma and mental health consequences related to institutional abuse identifying studies from the military, universities and colleges and from the Royal Commission into Institutional Responses to Child Sexual Abuse. It is also likely that the limited inclusion of

grey literature reduced articles exploring practice wisdom which would contribute to our understanding of the intersections between sexual assault and abuse and mental illness from a practitioner perspective, Research focusing on lived experience was also limited; one potential explanation for this is the difficulties of securing ethics approval for studies given the potential for inducing or increasing distress of participants. Hence, methodological constraints may produce gaps in evidence.

Specific analysis of gaps in the evidence by question follows.

Review Question 1

In addition to the findings already discussed, this review has identified a number of gaps in the existing literature that should be addressed in future research. It should be noted that the agreed inclusion and exclusion criteria for Review Question 1 were applied so that studies were only included if their primary focus was on the intersections between sexual assault and sexual abuse and mental health. Studies which only had a partial focus on the topic or produced a related finding, were not included.

There was insufficient evidence to determine if there is an increased risk of sexual assault if a person has a mental illness. The majority of studies included in this review used a cross-sectional design, rather than a longitudinal design, which means that many of the findings cannot determine directionality of the relationship between sexual assault and mental health. While there were some longitudinal studies included in the sample which found an association between childhood sexual abuse and subsequent symptoms of mental illness[37], none of the studies identified in this review tested the reverse relationship i.e. an increased risk of child sexual assault following diagnosis of a mental illness. A more expansive review that includes research published from the period preceding the last five years may identify more evidence on whether and how mental illness affects the risk of sexual assault victimisation.

Although some studies in the review highlighted the associations between sexual revictimisation and adverse mental health outcomes[6, 7, 26, 74], the overall evidence on how complex trauma affects mental illness symptoms and diagnoses was limited. This was due to the fact that many of the studies in this review measured sexual victimisation through indicators and questions that were focused on ascertaining whether participants had ever experienced sexual assault or abuse in their lifetime or during a certain time period, as opposed to the number of times participants had experienced sexual assault or abuse. A more expansive review of the literature may allow for identification of evidence focused on how complex trauma affects mental health outcomes and the ways in which complex trauma may differ from single incident trauma.

There were a number of issues with sampling which affected the overall quality of the evidence. Many studies used convenience sampling, meaning that the participants included in these studies were not necessarily representative of the target population. As such, the generalisability of the studies' findings may be limited and should be interpreted with caution. Further, some studies could not recruit a sample size that was large enough for comparisons to be made between population groups. For example, due to the small sample size in Nelson et al.'s[105] study of sexual minority youth, bisexual, gay and lesbian participants were coded into one category which prevented any analysis of the differences between these groups. Nevertheless, there was some evidence to suggest that, compared to heterosexual women, bisexual women who experienced sexual violence had worse mental health outcomes due to negative social reactions to disclosure.[26] Additional research is ultimately needed to gain a better understanding of why social support may be more crucial in the recovery of sexual minority women and how this may differ (or not) from the social support needs of other individuals affected by sexual assault and abuse.

Moreover, most of the studies relied on self-report measures for symptoms of mental illness based on validated instruments, such as the Beck Depression Inventory and the Patient Health Questionnaire, rather than a formal I diagnosis as would be provided by clinician or recognised classification system such as the DSM-5. The consequence of this being, most of the evidence provided in this review relates only to

associations between sexual assault and sexual abuse and symptoms of mental illness, rather than to a specific diagnosis of mental illness. The use of self-report measures has some benefits, as it is easier for researchers to obtain compared to official medical diagnoses and may capture the experiences of participants who have not had a formal diagnosis but nevertheless report clinically significant levels of symptoms. A small number of studies did not use validated instruments and simply asked participants if they had ever been diagnosed with a mental disorder[142], which ultimately impacts the overall quality of evidence of the study's findings.

Notably, there was a lack of evidence relating to the priority populations identified in the terms of the review. No studies examined mental health and sexual assault or abuse among older people. However, research with older populations is an emerging area of research, and so more studies may be available in the future. Similarly, no studies discussed mental health and sexual assault, or abuse experienced by people with a disability or refugees, groups which practitioners would identify as high-risk population groups. While several studies examined the intersections between mental health and sexual assault or abuse among CALD populations, many of these studies were focused on CALD populations in North America (e.g. African Americans, Latinas, Canadian Aboriginal People). The findings made in relation to these population groups have limited generalisability in the Australian context. The agreed search terms did not specify particular priority groups, and this might also explain why only a small number of studies relating to priority groups were identified. The research also was minimal about people in contact with the CJS. We know that 40% of people in prison have a prior mental health diagnosis. Due to the links between mental illness and sexual assault and abuse it would be expected that this group would have experiences of sexual assault and abuse either prior to contact with justice or system or within the justice system.

Review Question 2

There were also a number of gaps in the evidence in relation to service delivery for individuals, families and communities that are affected by sexual assault, sexual abuse and mental health. Again, the agreed inclusion and exclusion criteria resulted in some studies being excluded from the review. Studies needed to draw an explicit link between service models and mental health outcomes, to be included in Review Question 2. Furthermore, areas of service provision that may have relevance for sexual assault and sexual abuse, such as domestic and family violence or violence against women, were excluded if they did not disaggregate sexual assault or abuse from other types of violence.

There was limited empirical research that examined whether specific service models or approaches improved the mental health outcomes of people impacted by sexual assault and sexual abuse. For example, while trauma-informed approaches were widely covered amongst the studies, there was an assumption of what this approach means as opposed to an actual definition of the approach and a lack of rigorous evaluation of trauma-informed interventions for sexual violence.[114, 124] This may be because research in this area tends to focus on specific psychological interventions in responding to the mental health needs of survivors, such as Cognitive Behavioural Therapy. Studies looking at specific psychological interventions were beyond the scope of this review and were excluded.

Similar to Review Question 1, the studies included in Review Question 2 also yielded limited evidence in relation to priority groups. None of the studies in Review Question 2 discussed the experiences of people with a disability, older people or refugees. While some studies discussed services for Aboriginal and Torres Strait Islander people, the overall evidence regarding what could be helpful in these communities was limited. However, this does not mean that the literature doesn't exist, but rather was not identified using the agreed methodology. Such research may not be published in peer-reviewed journals or in grey literature databases, which is where the studies for this review were primarily sourced.

There was also a lack of research exploring the experiences of people from rural, regional and remote areas. Studies primarily focused on urban populations or did not specify the type of geographical setting in which the research took place. This is an important area for future research, given that services are often limited in these communities and the services that do exist are highly susceptible to funding cuts.

Implications

This review provided insight into **principles of care or service delivery** when working with people who have been affected by sexual assault or sexual abuse. These principles include gender-sensitive care, continuity of care, recovery principles, person-centred or patient-centred practice, empowerment, and trauma-informed care.

There was **limited empirical research that examined whether specific service models or approaches improved the mental health outcomes of people impacted by sexual assault and sexual abuse.** For example, while trauma-informed approaches were widely covered amongst the studies, there was a lack of rigorous evaluation of trauma-informed interventions for sexual violence.[114, 124]

A number of studies provided evidence on how **negative responses to disclosure increases the risk of mental illness symptoms in victims and survivors**. This points to the need for services, practitioners and the community more broadly to be aware of the importance of providing an effective and helpful response to individuals who have experienced sexual assault and abuse. It is crucial that service providers offer a supportive environment in which survivors can share their experiences, as well as assist survivors in cultivating relationships with people who are supportive of their recovery. Service providers should recognise that disclosure is often not a single event and may not be indicative of the full lived experience of victims and survivors and that disclosures may be partial orbehavioural and can occur over time with denial and retraction common.

There was also evidence that **victims and survivors of sexual assault and/or abuse are at risk of experiencing symptoms of mental illness and co-existing substance use issues.** This highlights the need for services to address the complex needs of victims and survivors. There is emerging evidence to support **integrated and collaborative responses** across service systems, which recognises the intersections between sexual assault and abuse and mental health that have been identified in this review.

Overall there was a **lack of studies that discussed the experiences of people with a disability, older people, refugees or people in contact with the criminal justice system**.

While **some studies discussed services for Aboriginal and Torres Strait Islander people, the overall evidence regarding what could be helpful in these communities was limited in this review**. However, this does not mean that the literature doesn't exist, but rather was not identified using the agreed methodology. Such research may not be published in peer-reviewed journals or in grey literature databases, which is where the studies for this review were sourced.

There was insufficient evidence to determine if there is an increased risk of sexual assault if a person has a mental illness. The majority of studies included in this review used a cross-sectional design, rather than a longitudinal design, which means that many of the **findings cannot determine directionality of the relationship between sexual assault and mental health**.

In summary, the evidence identified in this review suggests that people who have experienced sexual assault or sexual abuse are more likely to experience symptoms of mental illness. This review also identified risk factors for adverse mental health outcomes among survivors of sexual assault and abuse, including feelings of shame, negative responses to disclosure, and experiencing more severe forms of abuse. There was also evidence of protective factors against symptoms of mental illness among survivors, including greater trauma-coping self-efficacy, self-compassion, and a strong sense of cultural identity.

These findings have important implications for service delivery in responding to individuals, families and communities affected by sexual assault and abuse and mental health. It is crucial that service providers are aware of the intersections between mental health and sexual assault and abuse, including risk and protective factors, and provide a supportive environment for survivors to share their experiences. Furthermore, survivors of sexual assault and abuse and service providers have identified important factors in the delivery of trauma-informed care, including the development of strong referral pathways, increased accessibility of services, and staff training on trauma-informed approaches. However, there was a lack of empirical evidence for specific service models that may improve mental health outcomes for survivors. This review identified limited research focusing on the needs of Aboriginal and Torres Strait Islander communities, the older people, refugees, people in contact with the criminal justice system and people from rural and remote communities, highlighting the need for future research in these areas. Despite these gaps in the literature, the current evidence base provides insight into how services can work effectively and sensitively with survivors of sexual assault and abuse to improve their mental health outcomes.

References

1. Australian Bureau of Statistics. 4510.0 - Recorded Crime - Victims, Australia, 2018. Canberra: Australian Bureau of Statistics 2019a
2. NSW Bureau of Crime Statistics and Research. Incidents of sexual offences (sexual assault) from July 2018 to June 2019. NSW BOSCAR; 2019
3. Australian Bureau of Statistics. 4906.0 Personal Safety, Australia 2016. Canberra: Australian Bureau of Statistics2017
4. Australian Bureau of Statistics. 4364.0.55.001 - National Health Survey: First Results, 2017-18. Canberra: Australian Bureau of Statistics 2019b
5. Australian Institute of Health and Welfare. Australian Burden of Disease Study: Impact and causes of illness and death in Australia 2011. Canberra: Australian Institute of Health and Welfare 2016.
6. Creech SK, Orchowski LM. Correlates of sexual revictimization among women veterans presenting to primary care. Traumatology. 2016;22(3):165-73.
7. Lamis DA, Cavanaugh CE, Anastasiades MH, Garcia-Williams A, Anderson C, et al. Intimate partner sexual coercion mediates the childhood sexual abuse–suicidal ideation link among African American women. Journal of Black Psychology. 2017;43(3):305-24.
8. Women NSW. NSW Sexual Assault Strategy 2018-2021. Sydney: NSW Government; 2018.
9. Royal Commission into Institutional Responses to Child Sexual Abuse. Final Report. Canberra: Royal Commission into Institutional Responses to Child Sexual Abuse; 2017.
10. NSW Mental Health Commission. Living Well: A Strategic Plan for Mental Health in NSW. Sydney: NSW Mental Health Commission; 2014.
11. Australian Bureau of Statistics. 4125.0 - Gender Indicators, Australia, Sep 2018. Canberra: Australian Bureau of Statistics; 2018
12. Australian Institute of Health and Welfare. Family, domestic and sexual violence in Australia: continuing the national story 2019. Canberra: Australian Institute of Health and Welfare 2019a.
13. Australian Institute of Health and Welfare. Key Performance Indicators for Australian Public Mental Health Services 2016-17. Canberra: Australian Institute of Health and Welfare 2018.
14. Australian Bureau of Statistics. 4326.0 National Survey of Mental Health and Wellbeing: Summary of Results, 2007. Canberra: Australian Bureau of Statistics 2008
15. Hyde Z, Doherty M, Tilley M, McCaul K, Rooney R, et al. The first Australian national trans mental health study: Summary of results. 2013
16. Australian Institute of Family Studies. Intimate partner violence in lesbian, gay, bisexual, trans, intersex and queer communities: key issues. Australian Institute of Family Studies, editor. Canberra: Australian Institute of Family Studies 2015.
17. James S, Herman J, Rankin S, Keisling M, Mottet L, et al. The report of the 2015 US Transgender Survey. 2016
18. NSW Ombudsman. NSW: NSW Ombudsman. 2018. Available from: https://www.ombo.nsw.gov.au/__data/assets/pdf_file/0003/62139/Abuse-and-neglect-of-vulnerable-adults-in-NSW-November-2018.pdf
19. Australian Institute of Health and Welfare. The health of Australia's prisoners 2018. Canberra: Australian Institute of Health and Welfare 2019b.
20. McCausland R, Baldry E, Johnson S, Cohen A. People with mental health disorders and cognitive impairment in the criminal justice system: cost-benefit analysis of early support and diversion. Sydney, University of New South Wales and PwC. 2013
21. Hong QN, Pluye P, Fàbregues S, Bartlett G, Boardman F, et al. Mixed Methods Appraisal Tool (MMAT) Version 2018. Canada: McGill University; 2018.
22. Guha A, Luebbers S, Papalia N, Ogloff JRP. A follow-up study of mental health service utilisation in a cohort of 2433 sexually abused Australian children utilising five years of medical data. Child Abuse & Neglect. 2019;90:174-84.
23. Easton SD, Kong J, Gregas MC, Shen C, Shafer K. Child sexual abuse and depression in late life for men: a population-based, longitudinal analysis. The journals of gerontology: Series B, Psychological sciences and social sciences. 2019;74(5):842-52.
24. Kealy D, Spidel A, Ogrodniczuk JS. Self-conscious emotions and suicidal ideation among women with and without history of childhood sexual abuse. Counselling and Psychotherapy Research. 2017;17(4):269-75.

25. Rosmarin DH, Pirutinsky S, Appel M, Kaplan T, Pelcovitz D. Childhood sexual abuse, mental health, and religion across the Jewish community. Child Abuse & Neglect. 2018;81:21-28.
26. Sigurvinsdottir R, Ullman SE. Sexual jssault in bisexual and heterosexual women survivors. Journal of Bisexuality. 2016a;16(2):163-80.
27. Sigurvinsdottir R, Ullman SE. Sexual orientation, race, and trauma as predictors of sexual assault recovery. Journal of Family Violence. 2016b;31(7):913-21.
28. Turner S, Taillieu T, Cheung K, Afifi TO. The relationship between childhood sexual abuse and mental health outcomes among males: results from a nationally representative United States sample. Child Abuse & Neglect. 2017;66:64-72.
29. Ulibarri MD, Ulloa EC, Salazar M. Associations between mental health, substance use, and sexual abuse experiences among Latinas. Journal of Child Sexual Abuse. 2015;24(1):35-54.
30. Willie TC, Overstreet NM, Peasant C, Kershaw T, Sikkema KJ, et al. Anxiety and depressive symptoms among people living with HIV and childhood sexual abuse: the role of shame and posttraumatic growth. AIDS and Behavior. 2016;20(8):1609-20.
31. Wolfe-Clark AL, Bryan CJ, Bryan AO, Reynolds ML, Fuessel-Herrmann D, et al. Child sexual abuse, military sexual trauma, and psychological distress among male military personnel and veterans. Journal of Child & Adolescent Trauma. 2017;10(2):121-28.
32. Wosu AC, Gelaye B, Williams MA. History of childhood sexual abuse and risk of prenatal and postpartum depression or depressive symptoms: An epidemiologic review. Archives of Women's Mental Health. 2015;18:659-71.
33. Rees S, Simpson L, McCormack C, Moussa B, Amanatidis S. Believe #metoo: sexual violence and interpersonal disclosure experiences among women attending a sexual assault services in Australia: a mixed-methods study. BMJ Open. 2019;9(7):e026773.
34. Zeglin RJ, DeRaedt MR, Lanthier RP. Does having children moderate the effect of child sexual abuse on depression? Journal of Child Sexual Abuse. 2015;24(6):607-26.
35. Bradley A, Karatzias T, Coyle E. Derealization and self-harm strategies are used to regulate disgust, fear, and sadness in adult survivors of childhood sexual abuse. Clinical Psychology & Psychotherapy. 2019;26(1):94-104.
36. Mokma TR, Eshelman LR, Messman-Moore TL. Contributions of child sexual abuse, self-blame, posttraumatic stress symptoms, and alcohol use to women's risk for forcible and substance-facilitated sexual assault. Journal of Child Sexual Abuse. 2016;25(4):428-48.
37. Ullman SE. Sexual revictimization, PTSD, and problem drinking in sexual assault survivors. Addictive Behaviour. 2016;53:7-10.
38. Boroughs MS, Ehlinger PP, Batchelder AW, Safren SA, O'Cleirigh C. Posttraumatic stress symptoms and emerging adult sexual minority men: implications for assessment and treatment of childhood sexual abuse. Journal of Traumatic Stress. 2018;31(5):665-75.
39. Gomez JM, Freyd JJ. High betrayal child sexual abuse and hallucinations: a test of an indirect effect of dissociation. Journal of Child Sexual Abuse. 2017;26(5):507-18.
40. Lamis DA, Kapoor S, Evans APB. Childhood sexual abuse and suicidal ideation among bipolar patients: existential but not religious well-being as a protective factor. Suicide and Life-Threatening Behavior. 2019;49(2):401-12.
41. DeCou CR, Lynch SM, DeHart DD, Belknap J. Evaluating the association between childhood sexual abuse and attempted suicide across the lifespan: findings from a nationwide study of women in jail. Psychological Services. 2016;13(3):254-60.
42. Anderson RE, Tarasoff LA, VanKim N, Flanders C. Differences in rape acknowledgment and mental health outcomes across transgender, nonbinary, and cisgender bisexual youth. Journal of Interpersonal Violence. 2019:1-23.
43. Carper TL, Mills MA, Steenkamp MM, Nickerson A, Salters-Pedneault K, et al. Early PTSD symptom sub-clusters predicting chronic posttraumatic stress following sexual assault. Psychological Trauma: Theory, Research, Practice, and Policy. 2015;7(5):442-7.
44. DeCou CR, Cole TT, Lynch SM, Wong MM, Matthews KC. Assault-related shame mediates the association between negative social reactions to disclosure of sexual assault and psychological distress. Psychological Trauma: Theory, Research, Practice, and Policy. 2017;9(2):166-72.
45. DeCou CR, Mahoney CT, Kaplan SP, Lynch SM. Coping self-efficacy and trauma-related shame mediate the association between negative social reactions to sexual assault and PTSD symptoms. Psychological Trauma: Theory, Research, Practice, and Policy. 2019;11(1):51-54.
46. DiMauro J, Renshaw KD, Blais RK. Sexual vs. non-sexual trauma, sexual satisfaction and function, and mental health in female veterans. Journl of Trauma & Dissociation. 2018;19(4):403-16.

47. Du Mont J, Johnson H, Hill C. Factors associated with posttraumatic stress disorder symptomology among women who have experienced sexual assault in Canada. Journal of Interpersonal Violence. 2019:886260519860084.
48. Elder WB, Domino JL, Mata-Galán EL, Kilmartin C. Masculinity as an avoidance symptom of posttraumatic stress. Psychology of Men & Masculinity. 2017;18(3):198-207.
49. Hakimi D, Bryant-Davis T, Ullman SE, Gobin RL. Relationship between negative social reactions to sexual assault disclosure and mental health outcomes of Black and White female survivors. Psychological Trauma: Theory, Research, Practice, and Policy. 2018;10(3):270-75.
50. Hamrick LA, Owens GP. Exploring the mediating role of self-blame and coping in the relationships between self-compassion and distress in females following the sexual assault. Journal of Clinical Psychology. 2019;75(4):766-79.
51. Kline NK, Berke DS, Rhodes CA, Steenkamp MM, Litz BT. Self-blame and PTSD following sexual assault: a longitudinal analysis. Journal of Interpersonal Violence. 2018:886260518770652.
52. McConnell AA, Messman-Moore TL, Gratz KL, DiLillo D. Beyond the force-substance dichotomy: examining the experience of combined and incapacitated type rapes and their relation to PTSD symptoms. Journal of Interpersonal Violence. 2017:886260517724252.
53. Nikulina V, Bautista A, Brown EJ. Negative responses to disclosure of sexual victimization and victims' symptoms of PTSD and depression: the protective role of ethnic identity. Journal of Interpersonal Violence. 2016:886260516676475.
54. Peter-Hagene LC, Ullman SE. Sexual assault-characteristics effects on PTSD and psychosocial mediators: a cluster-analysis approach to sexual assault types. Psychological Trauma: Theory, Research, Practice, and Policy. 2015;7(2):162-70.
55. Peter-Hagene LC, Ullman SE. Longitudinal effects of sexual assault victims' drinking and self-blame on posttraumatic stress disorder. Journal of Interpersonal Violence. 2016
56. Rosellini AJ, Street AE, Ursano RJ, Chiu WT, Heeringa SG, et al. Sexual assault victimization and mental health treatment, suicide attempts, and career outcomes among women in the US army. American Journal of Public Health. 2017;107(5):732-39.
57. Sigurvinsdottir R, Ullman SE, Canetto SS. Self-blame, psychological distress, and suicidality among African American female sexual assault survivors. Traumatology. 2019
58. Snipes DJ, Calton JM, Green BA, Perrin PB, Benotsch EG. Rape and Posttraumatic Stress Disorder (PTSD): examining the mediating role of explicit sex-power beliefs for men versus women. Journal of Interpersonal Violence. 2017;32(16):2453-70.
59. Tarzia L, Thuraisingam S, Novy K, Valpied J, Quake R, et al. Exploring the relationships between sexual violence, mental health and perpetrator identity: a cross-sectional Australian primary care study. BMC Public Health. 2018a;18(1):1410.
60. Ullman SE, Peter-Hagene LC. Longitudinal relationships of social reactions, PTSD, and revictimization in sexual assault survivors. Journal of Interpersonal Violence. 2016;31(6):1074-94.
61. Ullman SE, Relyea M. Social support, coping, and posttraumatic stress symptoms in female sexual assault survivors: a longitudinal analysis. Journal of Trauma and Stress. 2016;29(6):500-06.
62. White KL, Harris JA, Bryan AO, Reynolds M, Fuessel-Herrmann D, et al. Military sexual trauma and suicidal behavior among National Guard personnel. Comprehensive Psychiatry. 2018;87:1-6.
63. Wilson LC, Miller KE, Leheney EK, Ballman AD, Scarpa A. Examining the psychological effect of rape acknowledgment: the interaction of acknowledgment status and ambivalent sexism. Journal of Clinical Psychology. 2017;73(7):864-78.
64. Young-Wolff KC, Sarovar V, Klebaner D, Chi F, McCaw B. Changes in psychiatric and medical conditions and health care utilization following a diagnosis of sexual assault: A retrospective cohort study. Medical Care. 2018;56(8):649-57.
65. Bhuptani PH, Kaufman JS, Messman-Moore TL, Gratz KL, DiLillo D. Rape disclosure and depression among community women: the mediating roles of shame and experiential avoidance. Violence Against Women. 2019;25(10):1226-42.
66. Blayney JA, Hequembourg A, Livingston JA. Rape acknowledgment and sexual minority women's mental health and drinking behaviors. Journal of Interpersonal Violence. 2018:1-17.
67. Carey KB, Norris AL, Durney SE, Shepardson RL, Carey MP. Mental health consequences of sexual assault among first-year college women. Journal of American College Health. 2018;66(6):480-86.
68. Chang EC, Lin J, Fowler EE, Yu EA, Yu T, et al. Sexual assault and depressive symptoms in college students: do psychological needs account for the relationship? Social Work. 2015;60(3):211-18.
69. Gomez JM, Freyd JJ. Psychological outcomes of within-group sexual violence: evidence of cultural betrayal. Journal of Immigrant and Minority Health. 2018;20(6):1458-67.

70. McDougall EE, Langille DB, Steenbeek AA, Asbridge M, Andreou P. The relationship between non-consensual sex and risk of depression in female undergraduates at universities in Maritime Canada. Journal of Interpersonal Violence. 2016:886260516675468.
71. Monteith LL, Bahraini NH, Matarazzo BB, Soberay KA, Smith CP. Perceptions of institutional betrayal predict suicidal self-directed violence among veterans exposed to military sexual trauma. Journal of Clinical Psychology. 2016b;72(7):743-55.
72. Wilson LC, Newins AR, White SW. The impact of rape acknowledgment on survivor outcomes: the moderating effects of rape myth acceptance. Journal of Clinical Psychology. 2018;74(6):926-39.
73. Bryan CJ, Bryan AO, Clemans TA. The association of military and premilitary sexual trauma with risk for suicide ideation, plans, and attempts. Psychiatry Research. 2015;227(2-3):246-52.
74. Gilmore AK, Hahn CK, Jaffe AE, Walsh K, Moreland AD, et al. Suicidal ideation among adults with a recent sexual assault: prescription opioid use and prior sexual assault. Addictive Behaviour. 2018;85:120-24.
75. Gomez JM. High betrayal adolescent sexual abuse and nonsuicidal self-Injury: the role of depersonalization in emerging adults. Journal of Child Sexual Abuse. 2019;28(3):318-32.
76. Keefe KM, Hetzel-Riggin MD, Sunami N. The mediating roles of hostility and dissociation in the relationship between sexual assault and suicidal thinking in college students. Journal of Interpersonal Violence. 2017:886260517698282.
77. Sexton MB, Davis MT, Anderson RE, Bennett DC, Sparapani E, et al. Relation between sexual and gender minority status and suicide attempts among veterans seeking treatment for military sexual trauma. Psychological Services. 2018;15(3):357-62.
78. Wiblin J, Holder N, Holliday R, Suris A. Predictors of unbearability, unlovability, and unsolvability in veterans with military-sexual-trauma-related posttraumatic stress disorder. Journal of Interpersonal Violence. 2018:886260518777554.
79. Stephens SG, Wilke DJ. Sexual violence, weight perception, and eating disorder indicators in college females. Journal of American College Health. 2016;64(1):38-47.
80. Wilson LC, Scarpa A. A pilot study of the impact of sexist attitudes on male survivors of rape. Psychology of Men & Masculinity. 2017;18(4):409-13.
81. Manning D, Majeed-Ariss R, Mattison M, White C. The high prevalence of pre-existing mental health complaints in clients attending Saint Mary's Sexual Assault Referral Centre: Implications for initial management and engagement with the Independent Sexual Violence Advisor service at the centre. Journal of Forensic and Legal Medicine. 2019;61:102-07.
82. Kirkner A, Relyea M, Ullman SE. PTSD and problem drinking in relation to seeking mental health and substance use treatment among sexual assault survivors. Traumatology. 2018;24(1):1-7.
83. Badour CL, Feldner MT. Disgust and imaginal exposure to memories of sexual trauma: Implications for the treatment of posttraumatic stress. Psychological Trauma: Theory, Research, Practice, and Policy. 2016;8(3):267-75.
84. Barnett MD, Maciel IV. Counterfactual thinking among victims of sexual assault: relationships with posttraumatic stress and posttraumatic growth. Journal of Interpersonal Violence. 2019:1-16.
85. Dworkin ER. Risk for mental disorders associated with sexual assault: a meta-analysis. Trauma, Violence, & Abuse. 2018:1-18.
86. Dworkin ER, Menon SV, Bystrynski J, Allen NE. Sexual assault victimization and psychopathology: a review and meta-analysis. Clinical Psychology Review. 2017;56:65-81.
87. Dworkin ER, Ojalehto H, Bedard-Gilligan MA, Cadigan JM, Kaysen D. Social support predicts reductions in PTSD symptoms when substances are not used to cope: A longitudinal study of sexual assault survivors. Journal of Affective Disorders. 2018a;229:135-40.
88. Dworkin ER, Ullman SE, Stappenbeck C, Brill CD, Kaysen D. Proximal relationships between social support and PTSD symptom severity: a daily diary study of sexual assault survivors. Depression and Anxiety. 2018b;35(1):43-49.
89. Fergus TA, Bardeen JR. Main and interactive effects of mental contamination and tolerance of negative emotions in relation to posttraumatic stress symptoms following sexual trauma. Journal of Psychopathology and Behavioral Assessment. 2015;38(2):274-83.
90. Smith CP, Cunningham SA, Freyd JJ. Sexual violence, institutional betrayal, and psychological outcomes for LGB college students. Translational Issues in Psychological Science. 2017;2(4):351-60.
91. Walsh K, Koenen KC, Aiello AE, Uddin M, Galea S. Prevalence of sexual violence and posttraumatic stress disorder in an urban African-American population. Journal of Immigrant and Minority Health. 2014;16(6):1307-10.
92. Bone CW, Goodfellow AM, Vahidi M, Gelberg L. Prevalence of sexual violence and its association with depression among male and female patients with risky drug use in urban federally qualified health centers. Journal of Urban Health. 2018;95(1):111-15.

93. Brooker C, Tocque K. Mental health risk factors in sexual assault: what should sexual assault referral centre staff be aware of? Journal of Forensic and Legal Medicine. 2016;40:28-33.
94. Ehlke SJ, Kelley ML. Drinking to cope motivations as a mediator of the relationship between sexual coercion victimization and alcohol use among college women: the role of depressive symptoms. Violence Against Women. 2019;25(6):721-42.
95. Shevlin M, Mark Shevlin P, Murphy J, Read J. Testing complex hypotheses using secondary data analysis: is the association between sexual abuse and psychosis moderated by gender in a large prison sample? Journal of Criminal Psychology. 2015;5(2):92-98.
96. Voller E, Polusny MA, Noorbaloochi S, Street A, Grill J, et al. Self-efficacy, male rape myth acceptance, and devaluation of emotions in sexual trauma sequelae: findings from a sample of male veterans. Psychol Serv. 2015;12(4):420-7.
97. Chang C, Kaczkurkin AN, McLean CP, Foa EB. Emotion regulation is associated with PTSD and depression among female adolescent survivors of childhood sexual abuse. Psychological Trauma: Theory, Research, Practice, and Policy. 2018;10(3):319-26.
98. Rabinovitch SM, Kerr DC, Leve LD, Chamberlain P. Suicidal behavior outcomes of childhood sexual abuse: longitudinal study of adjudicated girls. Suicide and Life-Threatening Behavior. 2015;45(4):431-47.
99. Chaplo SD, Kerig PK, Bennett DC, Modrowski CA. The roles of emotion dysregulation and dissociation in the association between sexual abuse and self-injury among juvenile justice-involved youth. Journl of Trauma & Dissociation. 2015;16(3):272-85.
100. Sanders J, Hershberger AR, Kolp HM, Um M, Aalsma M, et al. PTSD symptoms mediate the relationship between sexual abuse and substance use risk in juvenile justice-involved youth. Child Maltreatment. 2018;23(3):226-33.
101. Agyapong VIO, Juhas M, Ritchie A, Ogunsina O, Ambrosano L, et al. Prevalence rate and demographic and clinical correlates of child sexual abuse among new psychiatric outpatients in a city in Northern Alberta. Journal of Child Sexual Abuse. 2017;26(4):442-52.
102. Cohn A, Hagman BT, Moore K, Mitchell J, Ehlke S. Does negative affect mediate the relationship between daily PTSD symptoms and daily alcohol involvement in female rape victims? Evidence from 14 days of interactive voice response assessment. Psychology of Addictive Behaviours. 2014;28(1):114-26.
103. Brooker C, Tocque K, Paul S. Assessment of the mental health status of a one year cohort attending a two sexual assault referral centres in England. Journal of Forensic and Legal Medicine. 2018;54:44-49.
104. Kmett JA, Eack SM. Characteristics of sexual abuse among individuals with serious mental illnesses. Journal of Interpersonal Violence. 2018;33(17):2725-44.
105. Nelon JL, De Pedro KT, Gilreath TD, Patterson MS, Holden CB, et al. A latent class analysis of the co-occurrence of sexual violence, substance use, and mental health in youth. Substance Use & Misuse. 2019:1-7.
106. Kintzle S, Schuyler AC, Ray-Letourneau D, Ozuna SM, Munch C, et al. Sexual trauma in the military: Exploring PTSD and mental health care utilization in female veterans. Psychological Services. 2015;12(4):394-401.
107. Dognin J, Sedlander E, Jay M, Ades V. Group education sessions for women veterans who experienced sexual violence: qualitative findings. Families, Systems, & Health. 2017;35(3):360-72.
108. Bergman AA, Hamilton AB, Chrystal JG, Bean-Mayberry BA, Yano EM. Primary care providers' perspectives on providing care to women Veterans with histories of sexual trauma. Womens Health Issues. 2019;29(4):325-32.
109. Kehle-Forbes SM, Harwood EM, Spoont MR, Sayer NA, Gerould H, et al. Experiences with VHA care: a qualitative study of U.S. women veterans with self-reported trauma histories. BMC Womens Health. 2017;17(1):38.
110. Quadara A, Stathopoulos M, Carson R, Bilgic S, R. K, et al. Pathways to support services for victim/survivors of child sexual abuse and their families. Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse; 2017.
111. Fong HF, Bennett CE, Mondestin V, Scribano PV, Mollen C, et al. Caregiver perceptions about mental health services after child sexual abuse. Child Abuse & Neglect. 2016;51:284-94.
112. Monteith LL, Bahraini NH, Gerber HR, Dorsey Holliman B, Schneider AL, et al. Military sexual trauma survivors' perceptions of veterans health administration care: a qualitative examination. Psychological Services. 2018
113. Starzynski LL, Ullman SE, Vasquez AL. Sexual assault survivors' experiences with mental health professionals: a qualitative study. Women & Therapy. 2017;40(1-2):228-46.
114. Quadara A. Implementing trauma-informed systems of care in health settings: the WITH study. Sydney: ANROWS; 2015.
115. Strauss Swanson C, Schroepfer T. Personal reactions to sexual assault disclosures made by female clients diagnosed with serious mental illness. The Journal of Mental Health Training, Education and Practice. 2018;13(4):248-56.

116. Grealy C, Farmer J, Milward K, McArthur M. Capturing practice knowledge from the Royal Commission support model. Sydney: 2017.
117. Rees S, Simpson L, McCormack C, Amandatis S. Understanding the directionality of mental health problems and sexual violence. In: Hegarty K, Tarzia L, Rees S, Fooks A, Forsdike K, et al., editors. Women's Input into a Trauma-informed systems model of care in Health settings (the WITH Study): Final Report. Sydney: ANROWS; 2017
118. Holland KJ, Rabelo VC, Cortina LM. Collateral damage: military sexual trauma and help-seeking barriers. Psychology of Violence. 2016;6(2):253-61.
119. Brooker C, Durmaz E. Mental health, sexual violence and the work of Sexual Assault Referral centres (SARCs) in England. Journal of Forensic and Legal Medicine. 2015;31:47-51.
120. Brooker C, Paul S, Sirdifield C. Mental health in sexual assault referral centres: a survey of forensic physicians. Journal of Forensic and Legal Medicine. 2018;58:117-21.
121. Eisenberg ME, Lust KA, Hannan PJ, Porta C. Campus sexual violence resources and emotional health of college women who have experienced sexual assault. Violence and Victims. 2016;31(2):274-84.
122. Hegarty K, Tarzia L, Rees S, Fooks A, Forsdike K, et al. Women's Input into a Trauma-informed systems model of care in Health settings (the WITH Study): Final Report. Sydney: ANROWS; 2017.
123. Tarzia L, Novy K, Forsdike K, Hegarty K. Women's pathways to safety and care after experiencing mental health problems and sexual violence. In: Hegarty K, Tarzia L, Rees S, Fooks A, Forsdike K, et al., editors. Women's Input into a Trauma-informed systems model of care in Health settings (the WITH Study): Final Report. Sydney: ANROWS; 2017a
124. Hegarty K, Tarzia L, Hooker L, Taft A. Interventions to support recovery after domestic and sexual violence in primary care. International Review of Psychiatry. 2016;28(5):519-32.
125. Paul J, Paul W. Counselor attitudes of effectiveness with sexually abused men. Community Mental Health Journal. 2016;52(8):1057-63.
126. Brooker C, Edmondson A, Hughes L. The contribution of mental health services to a new strategic direction for sexual assault and abuse services. Journal of Forensic and Legal Medicine. 2019;64:45-48.
127. Mansfield Y, Meehan T, Forward R, Richardson-Clarke F. Asking the question: childhood sexual abuse in adults with mental illness. Australian Social Work. 2016;70(3):363-71.
128. Cochran CB. An evidence-based approach to suicide risk assessment after sexual assault. Journal of Forensic Nursing. 2019;15(2):84-92.
129. Brooker C, Tocque K, Kennedy A, Brown M. The Care Programme Approach, sexual violence and clinical practice in mental health. Journal of Forensic and Legal Medicine. 2016;43:97-101.
130. Wherry JN, Huey CC, Medford EA. A national survey of child advocacy center directors regarding knowledge of assessment, treatment referral, and training needs in physical and sexual abuse. Journal of Child Sexual Abuse. 2015;24(3):280-99.
131. Tarzia L, Fooks A, Forsdike K, Fernbacher S, Hegarty K. Enacting and understanding change. In: Hegarty K, Tarzia L, Rees S, Fooks A, Forsdike K, et al., editors. Women's Input into a Trauma-informed systems model of care in Health settings (the WITH Study): Final Report. Sydney: ANROWS; 2017b
132. Tarzia L, Maxwell S, Valpied J, Novy K, Quake R, et al. Sexual violence associated with poor mental health in women attending Australian general practices. Australian and New Zealand Journal of Public Health. 2018b;41(5):518-23.
133. Quadara A, Hunter C. Principles of trauma-informed approaches to child sexual abuse: a discussion paper. Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse; 2016.
134. Gekoski A, Davidson JC, Horvath MAH. The prevalence, nature, and impact of intrafamilial child sexual abuse: findings from a rapid evidence assessment. Journal of Criminological Research, Policy and Practice. 2016;2(4):231-43.
135. Powell M, Westera N, Goodman-Delahunty J, Pichler A. An evaluation of how evidence is elicited from complainants of child sexual abuse. Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse; 2016.
136. Herbert JL, Bromfield L. Evidence for the efficacy of the child advocacy center model: a systematic review. Trauma, Violence & Abuse. 2016;17(3):341-57.
137. Simon VA, Barnett D, Smith E, Mucka L, Willis D. Caregivers' abuse stigmatization and their views of mental health treatment following child sexual abuse. Child Abuse & Neglect. 2017;70:331-41.
138. Schry AR, Hibberd R, Wagner HR, Turchik JA, Kimbrel NA, et al. Functional correlates of military sexual assault in male veterans. Psychological Services. 2015;12(4):384-93.
139. Carson KW, Babad S, Brown EJ, Brumbaugh CC, Castillo BK, et al. Why women are not talking about it: reasons for nondisclosure of sexual victimization and associated symptoms of posttraumatic stress disorder and depression. Violence Against Women. 2019:1077801219832913.

140. Koo KH, Nguyen HV, Andrasik MP, George WH. The cultural context of nondisclosure of alcohol-involved acquaintance rape among Asian American college women: a qualitative study. The Journal of Sex Research. 2015;52(1):55-68.
141. Sawrikar P, Katz I. The treatment needs of victims/survivors of child sexual abuse (CSA) from ethnic minority communities: A literature review and suggestions for practice. Children and Youth Services Review. 2017;79:166-79.
142. Hossain MB, Memiah P, Aderinka A. Are female college studnets who are diagnosed with depression at greater risk of experiencing sexual violence on college campus. Journal of Health Care for the Poor and Undeserved. 2014;25:1341-59.
143. Monteith LL, Menefee DS, Forster JE, Bahraini NH. A closer examination of sexual trauma during deployment: not all sexual traumas are associated with suicidal ideation. Suicide and Life-Threatening Behavior. 2016a;46(1):46-54.
144. Quadara A, Stathopoulos M, Carson R. Family relationships and the disclosure of institutional child sexual abuse. Sydney: Royal Commission into Institutional Responses to Child Sexual Abuse; 2016.

Appendix 1 – Review design

Search terms

Table 1. List of proposed search terms

Concept 1 (sexual assault/abuse)	Concept 2 (Mental health/trauma)	Concept 3 (Services/responses)
Sexual* assault*	Mental	Support*
Sexual* abuse*	Psycholog*	Service*
Rape*	Psychosocial	System*
CSA	Psychiatr*	Trauma-informed
Sexual exploitation	Suicid*	Trauma informed
Sexual* victimi*	Depression	Coordinat*
Sexual trauma	Anxiety	Integrat*
Sex* N/5 survivor*	Personality disorder*	Interagency
Incest*	BPD	Collaborat*
Indecent assault*	Identity disorder*	Multidisciplin*
Molest*	DID	Forensic
Sexual violence	Bipolar	Wellbeing
	Schiz*	
	Post traumatic stress	
	Post-traumatic stress	
	Posttraumatic stress	
	Stress* disorder*	
	PTSD	
	Eating disorder*	
	Self-harm	
	Self harm	
	Self injury	
	Self-injury	
	Trauma	
	Co-morbid*	
	Comorbid*	
	Dual diagnos*s	

Following our discussion with the Mental Health Commission and the Sax Institute, we have removed the following terms:

- From Concept 2: substance use, SUD*, substance-related disorder*, addictive disorder*, sex*dysfunction*, OCD, obsessive compulsive disorder*, obsessive-compulsive disorder, somatic disorder*
- From Concept 3: intervention*, treatment*, therap*, counsel*, groupwork, system*, response*, recover*, heal*, resilienc*, trauma practi*e, redress

We have also added the following search terms to Concept 2: co-morbid, comorbid, dual diagnos*s.

Appendix 2 – Review Question 1 Findings

Table 1. List and summary of publications relating to Theme 1 (n=22)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Boroughs, Ehlinger [38]	In a study of minority men with a history of CSA, men who were older (i.e. ≥30 years old) were more likely to have PTSD or a panic disorder, whilst men who were younger were more likely to engage in alcohol intoxication.
Bradley, Karatzias [35]	In a study of CSA survivors, trauma-related anger, sadness, disgust and fear were associated with more severe PTSD. Derealisation and self-harm mediated the relationships between sadness, disgust and fear and PTSD, but not between anger and PTSD.
Creech and Orchowski [6]	In a sample of women veterans receiving primary care at a hospital, individuals who had experienced both CSA and military sexual assault had more PTSD symptoms than those who experienced military sexual assault but not CSA.
DeCou, Lynch [41]	In this study of women in jail, women who had experienced CSA by a peer or an adult had greater odds of attempting suicide during their lifetime than women who had not experienced CSA.
Easton, Kong [23]	Men CSA survivors had greater depressive symptoms than men without a history of CSA. Social support was a protective factor against depressive symptoms for men who had experienced CSA.
Gomez and Freyd [39]	In a study of university students, having a history of high-betrayal CSA (i.e. CSA by a trusted or depended other) was associated with greater dissociation, which in turn was associated with more hallucinations.
Guha, Luebbers [22]	In a study that compared CSA survivors with a matched comparison group, CSA survivors had greater mental health service utilization than individuals who had not experienced CSA. Gender and age influenced mental health service utilisation amongst CSA survivors, with females who had experienced CSA after the age of 12 having the highest rates of prescriptions for analgesics, and mood stabilisers and antidepressants, and males who had experienced CSA after the age of 12 having the highest rates of contacts with psychiatrists and prescriptions for antipsychotics and anxiolytics.
Kealy, Spidel [24]	In a study of women admitted to an outpatient mental health clinic, CSA history was not associated with greater shame/guilt or depressive symptoms. However, shame, but not guilt, was associated with more frequent suicidal thoughts amongst women with a history of CSA.

Lamis, Cavanaugh [7]	In a study of African American women from low socioeconomic backgrounds, women who had experienced CSA were more likely to experience intimate partner sexual coercion, which in turn, increased their likelihood for experiencing suicidal ideation.
Lamis, Kapoor [40]	In a study of adults from an outpatient clinic for bipolar disorder, CSA was associated with greater likelihood of suicidal ideation through lower levels of existential wellbeing.
Mokma, Eshelman [36]	In a study of female college students, CSA was associated with greater self-blame, which was associated with greater PTSS.
Rosmarin, Pirutinsky [25]	In a sample of religiously diverse Jewish adults, CSA was associated with increased risk of psychiatric diagnosis, and greater depression and anxiety.
Sigurvinsdottir and Ullman [26]	In a sample of women survivors of sexual assault, CSA history was significantly associated with greater depression symptoms.
Sigurvinsdottir and Ullman [27]	In a sample of heterosexual and bisexual women survivors of sexual assault, CSA was associated with greater PTSD and depression symptoms.
Turner, Taillieu [28]	In a national study conducted in the US, men who had experienced CSA were more likely to experience depression, PTSD and anxiety disorders, and to attempt suicide than men who had experienced no abuse (i.e. no CSA or other childhood maltreatment).
Ulibarri, Ulloa [29]	In a sample of Latina women, experiences of childhood sexual abuse were significantly associated with greater depressive symptoms, PTSD symptoms and substance use. The association between CSA and PTSD was mediated by substance use.
Ullman [37]	In a longitudinal study of women survivors of sexual assault, CSA was associated with greater PTSD symptoms and problem drinking, and a greater risk of sexual revictimisation. PTSD and problem drinking at baseline, partially mediated the relationship between CSA and sexual revictimisation. Additionally, sexual revictimisation partially mediated the relationship between PTSD at a given time point, and future PTSD.
Willie, Overstreet [30]	CSA-related shame and lower levels of post-traumatic growth (PTG) associated with greater anxiety and depressive symptoms for heterosexual women with HIV. Only lower levels of PTG associated with greater depressive symptoms for men with HIV who have sex with men.
Wolfe-Clark, Bryan [31]	In a sample of male military personnel and veterans, having a history of CSA was associated with greater feelings of guilt, which was associated with greater PTSD and depressive symptoms.
Wosu, Gelaye [32]	A meta-analysis of studies reporting the relationship between CSA depression/depressive symptoms during the postpartum period suggests that participants with a history of CSA had 1.20-1.82 odds of having depression or depressive symptoms.
Zeglin, DeRaedt [34]	In a national study conducted in the US, children decreased the effect of CSA on depression amongst females.

Study type 5: Mixed-methods study

Rees [33]	In a study of women who had experienced sexual assault and who had a current or past mental disorder, two vignettes of the temporal associations between the lifetime experiences of sexual abuse/assault of women adult survivors and mental disorder was presented. The vignettes revealed how experiencing CSA and receiving negative responses from relatives and family members following disclosure of CSA, can lead to the onset of issues such as depression, panic disorder, psychosis in adulthood.

Table 2. List and summary of publications relating to Theme 2 (n=48)

Citation	Key Findings
Study type 1: Qualitative study	
Elder, Domino [48]	In a sample of male survivors of MST, masculinity norms were linked to PTSD avoidance.
Study type 3: Quantitative non-randomised study	
Anderson, Tarasoff [42]	In a sample of racially diverse, sexual and gender minority young adults, rape acknowledgement was significantly associated with increased anxiety, depression and PTSD symptoms. Amongst non-binary young adults, rape acknowledgement was related to greater depressive symptoms.
Bhuptani, Kaufman [65]	In a sample of women survivors of adult sexual assault, receiving victim-blaming responses following rape disclosure was associated with greater depressive symptoms through rape-related shame and experiential avoidance.
Blayney, Hequembourg [66]	In a sample of lesbian and bisexual women, acknowledged and unacknowledged rape victims had greater mental health symptoms than those who did not experience completed rape. Acknowledged rape victims had significantly greater depressive, anxiety and somatic symptoms and hazardous drinking scores, whilst unacknowledged rape victims had greater depressive symptoms and hazardous drinking scores. There were no significant differences in terms of mental health symptoms between acknowledged rape victims and unacknowledged rape victims.
Bryan, Bryan [73]	In a sample of military personnel and veterans, military unwanted sexual experiences were associated with greater likelihood of suicidal ideation, suicide planning and suicide attempt.
Carper, Mills [43]	In a sample of women who had experienced sexual assault, greater PTSS in the first month following sexual assault, was associated with greater PTSD in 4 months after assault through greater negative cognitions about the self.
Carey, Norris [67]	In this study of female college students, women who had experienced sexual assault in their first semester of university were more than twice as likely to experience depression and anxiety at the end of the semester.

Chang, Lin [68]	In a sample of college students, sexual assault within the past school year was associated with greater depressive symptoms. Lower levels of competence and autonomy partially mediated this relationship.
Creech and Orchowski [6]	In a sample of women veterans receiving primary care at a hospital, experiencing sexual assault whilst in the military was more strongly associated with PTSD symptom severity than experiencing sexual assault in other time periods. Individuals who had experienced both CSA and military sexual assault had more PTSD symptoms than those who experienced military sexual assault but not CSA. However, the difference in PTSD symptoms between women who had experienced military sexual assault only, and women who had experienced both military sexual assault and post-military sexual assault was not significant.
DeCou, Cole [44]	In a sample of female undergraduate students, negative reactions to sexual assault disclosure predicted higher levels of depression and PTSD via assault-related shame.
DeCou, Mahoney [45]	In a sample of undergraduate students who had experienced sexual assault, negative reactions to sexual assault disclosure was found to be indirectly associated with greater PTSD symptoms through greater trauma-related shame and lower trauma-coping self-efficacy.
DiMauro, Renshaw [46]	In a sample of female veterans who had experienced trauma, individuals who experienced sexual trauma experienced greater PTSD and depressive symptoms, greater suicidality and lower sexual satisfaction compared to veterans who experienced nonsexual trauma.
Du Mont, Johnson [47]	In a Canadian study of women who had experienced sexual assault in the last year, having other traumatic life experiences (e.g. dating violence, stalking, witnessing violence between parents as a child), and having the perpetrator be someone that they knew increased the risk of experiencing PTSD symptoms. White women also had greater odds of experiencing PTSD symptoms than women who belonged to an Aboriginal or minority cultural/racial background.
Gilmore, Hahn [74]	In a sample of women who had received a sexual assault medical forensic exam, women who had greater acute PTSS, and women who reported both prescription opioid use and prior sexual victimisation reported more serious suicidal ideation.
Gomez [75]	In a sample of university students, adolescent sexual abuse was related to NSSI. High betrayal adolescent sexual abuse (i.e. adolescent sexual abuse by a close other) was associated with greater depersonalisation, which in turn predicted NSSI.
Gomez and Freyd [69]	In a sample of college students, minority status individuals (i.e. identifying as a racial/cultural minority, Muslim, foreign national, gay, lesbian or bisexual) who experienced sexual violence from a fellow minority group member had greater depression symptoms.
Hakimi, Bryant-Davis [49]	In a sample of female participants who had an unwanted sexual experience, negative reactions to sexual assault disclosure were

	significantly associated with poorer mental health outcomes, and in particular, PTSD and depression.
Hamrick and Owens [50]	In a sample of female adult sexual assault survivors, greater self-compassion was indirectly associated with less severe PTSD through less self-blame and less disengagement coping. Only characterological self-blame was found to partially mediate the relationship between self-compassion and depression.
Keefe, Hetzel-Riggin [76]	In a sample of undergraduate students, dissociation and feeling hostility partially mediated the relationship between adult sexual assault and suicidal ideation.
Kline, Berke [51]	In this study of female survivors of sexual assault, behavioural self-blame in the first month following sexual assault predicted PTSD symptom severity in the month after. However, after the first month, self-blame no longer predicted future PTSD symptom severity. Instead, earlier PTSD symptom severity predicted future PTSD symptom severity.
Lamis, Cavanaugh [7]	Amongst African American women from low socioeconomic backgrounds, women who had experienced CSA were more likely to experience intimate partner sexual coercion, which in turn, increased their likelihood for experiencing suicidal ideation.
McConnell, Messman-Moore [52]	In a sample of women survivors of adult sexual assault, women who had experienced combined rape (i.e. rape that involved the use of force and where the victim was intoxicated but conscious), reported greater PTSD symptoms than women who experienced impaired rape (i.e. rape where victim was intoxicated to the point of unconsciousness) or forcible-only rape (i.e. rape where victim was not intoxicated but use/threat of force was involved). Women who had experienced incapacitated rape (i.e. rape where the victim was intoxicated to the point of unconsciousness) did not have significantly different PTSD symptom severity than participants in the other groups.
McDougall, Langille [70]	In this study of female undergraduates, participants who experienced non-consensual sex whilst at university were more than twice as likely to have depression than participants who did not
Monteith, Bahraini [71], Monteith, Menefee, Forster and Bahraini [143]	In a sample of previously deployed military veterans admitted to trauma-focused inpatient treatment, participants who experienced more severe forms of sexual trauma during deployment (i.e. sexual assault) were significantly more likely to experience suicidal ideation.
Monteith [143]	In a sample of veterans who had experienced military sexual assault, perception of institutional betrayal was related to greater depressive symptoms, and higher likelihood of attempting suicide.
Nikulina, Bautista [53]	In this study of undergraduate women, a greater sense of cultural identity was found to be a protective factor against PTSD, but not depression, for women who had experienced certain negative responses to their first disclosure of sexual assault victimisation.
Peter-Hagene and Ullman [54]	In a sample of women who had experienced sexual assault, women who had experienced high-violence or alcohol-related sexual assault had greater PTSD symptoms than those who had experienced moderate severity sexual assault. The effects of these assault categories on PTSD

	symptoms were mediated by character-related self-blame attributions and experiencing individuals turn against them following sexual assault disclosure.
Peter-Hagene and Ullman [55]	In a study of women survivors of sexual assault, women who had been drinking prior to the assault reported less PTSD symptoms overall. Nevertheless, a relationship between drinking and characterological self-blame was also found, and such self-blame was associated with increased PTSD symptoms.
Rosellini, Street [56]	Compared to a non-victimised control group, female veterans with an administratively recorded sexual assault victimisation during deployment had higher odds of receiving mental health treatment, and treatment for PTSD.
Sexton, Davis [77]	In a study of veterans in MST-related treatment, individuals who identified as an SGM were at a greater risk of attempting suicide than those who did not identify as an SGM.
Sigurvinsdottir, Ullman [57]	In a sample of African American female survivors of sexual assault, self-blame following sexual assault significantly predicted PTSD and depressive symptoms. Depressive symptoms then predicted suicidal ideation, and PTSD symptoms predicted suicide attempt
Sigurvinsdottir and Ullman [26]	In a longitudinal study of women survivors of sexual assault, sexual revictimisation during the study was associated with greater depression symptoms.
Sigurvinsdottir and Ullman [27]	In a longitudinal study of women survivors of sexual assault experiencing sexual revictimisation during the study was associated with greater depression and PTSD symptoms.
Snipes, Calton [58]	In this study of undergraduate students, rape was associated with greater PTSD symptom severity for both men and women. Although beliefs that power and sex are connected partially mediated this relationship for men, it did not mediate this relationship for women.
Stephens and Wilke [79]	In this study of female college students, individuals who had experienced sexual violence were at a greater risk of engaging in purging behaviours.
Tarzia, Maxwell [132]	In a sample of women attending a GP clinic, participants who had experienced sexual violence as an adult, experienced greater anxiety symptoms compared to women who experienced no violence.
Tarzia, Thuraisingam [59]	In a sample of women attending a GP clinic, participants who had experienced sexual assault had significantly higher levels of PTSD symptoms, anxiety symptoms, and depressive symptoms compared to women who experienced no assault.
Ulibarri, Ulloa [29]	In a sample of Latina women, experiences of sexual abuse in adulthood was significantly associated with increased symptoms of depression, and alcohol use and substance use. The association between adult sexual abuse and depression was mediated by alcohol abuse.
Ullman [37]	In this longitudinal study of women survivors of sexual assault, CSA was associated with more PTSD symptoms and problem drinking, and a greater risk of experiencing sexual revictimisation during follow-up. PTSD

	and problem drinking at baseline, partially mediated the relationship between CSA and sexual revictimisation. Additionally, sexual revictimisation partially mediated the relationship between PTSD at a given time point, and future PTSD.
Ullman and Peter-Hagene [60]	In a sample of adult survivors of sexual assault, negative initial and concurrent social reactions to disclosure were related to greater PTSD symptoms. Greater PTSD symptoms was, in turn, related to more negative social reactions.
Ullman and Relyea [61]	In a sample of female sexual assault survivors, associations between negative reactions to disclosure and maladaptive coping, and PTSS were found. Both PTSS and maladaptive coping were, in turn, associated with more negative reactions to disclosure.
White, Harris [62]	In a sample of military personnel, participants who experienced MST were more likely to have a probable diagnosis of PTSD, depression and alcohol use disorder compared to those who did not experience MST.
Wiblin, Holder [78]	In this study of MST survivors with MST-related PTSD, greater depressive symptoms and trauma-related negative cognitions about the self were associated with the suicide cognitions of unbearability, unlovability and unsolvability. Poorer physical health functioning was only related to greater unbearability, whilst negative cognitions about self-blame was only related to greater unsolvability.
Wilson, Miller [63]	In a sample of female survivors of rape, rape acknowledgement was significantly related to more depressive and PTSD symptoms. Whilst hostile sexism did not moderate these associations, benevolent sexism did, such that the acknowledged rape survivors who reported low benevolent sexism had greater PTSD and depressive symptoms than acknowledged and unacknowledged survivors who reported high benevolent sexism.
Wilson, Newins [72]	In a study of female undergraduate students, rape myth acceptance moderated the relationship between rape acknowledgement and depression. Acknowledged rape survivors that endorsed greater rape myths had greater risk of depression.
Wilson and Scarpa [80]	In this study of male college students who had experienced rape, those who endorsed higher levels of hostile sexism and lower levels of benevolent sexism had greater PTS symptoms.
Wolfe-Clark, Bryan [31]	In a sample of military personnel and veterans, participants who experienced MST, or MST and childhood sexual abuse, both experienced greater symptoms of PTSD and depression compared to participants with no history of sexual victimisation.
Young-Wolff, Sarovar [64]	Adult female patients who had experienced sexual assault and who were attending a health care service were more likely to have anxiety, depression, eating disorder, bipolar disorder, PTSD, psychotic disorder and a substance use disorder than a matched control group. They also had significantly higher rates pf psychiatric health care utilisation.

Table 3. List and summary of publications relating to Theme 3 (n=2)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Kirkner, Relyea [82]	In a sample of women who had experienced sexual assault, White women were more likely to seek treatment from mental health services compared to African American women. The study also found a significant relationship between PTSD scores and help-seeking behaviour. Participants with higher PTSD scores were significantly more likely to seek mental health treatment. However, participants with co-occurring PTSD and problem drinking were less likely to seek treatment for substance use.
Study type 4: Quantitative descriptive	
Manning, Majeed-Ariss [81]	In this study of clients who attended a sexual assault referral centre for a forensic medical examination, more than two-thirds (68.9%) reported a pre-existing mental health complaint in the form of a pre-existing mental health condition, current medication prescription for a mental health condition or previous self-harm or suicide attempt. 54.1% of clients with a pre-existing mental health complaint presented to the centre more than 24 hours after sexual assault, compared to 32.1% of clients without a pre-existing mental health complaint.

Table 4. List and summary of publications relating to Theme 4 (n=2)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Mokma, Eshelman [36]	In this study of female college students, CSA was indirectly associated with greater risk of substance-facilitated adult sexual assault through pathways involving global self-blame, PTS symptoms and alcohol use. CSA was also indirectly associated with greater risk of forcible adult sexual assault via a pathway involving global self-blame and PTS symptoms.
Ullman [37]	In this longitudinal study of women survivors of sexual assault, CSA was associated with more PTSD symptoms and problem drinking, and a greater risk of experiencing sexual revictimisation during follow-up. PTSD and problem drinking at baseline, partially mediated the relationship between CSA and sexual revictimisation.

Table 5. List and summary of publications relating to Theme 5 (n=10)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Bhuptani, Kaufman [65]	In a sample of women survivors of adult sexual assault, receiving victim-blaming responses following rape disclosure was associated with greater

	depressive symptoms through rape-related shame and experiential avoidance.
DeCou, Cole [44]	In a sample of female undergraduate students, negative reactions to sexual assault disclosure predicted higher levels of depression and PTSD via assault-related shame.
DeCou, Mahoney [45]	In a sample of undergraduate students who had experienced sexual assault, negative reactions to sexual assault disclosure was found to be indirectly associated with greater PTSD symptoms through greater trauma-related shame and lower trauma-coping self-efficacy.
Hakimi, Bryant-Davis [49]	In a sample of female participants who had an unwanted sexual experience, negative reactions to sexual assault disclosure were significantly associated with poorer mental health outcomes, and in particular, PTSD and depression.
Nikulina, Bautista [53]	In this study of undergraduate women, a greater sense of cultural identity was found to be a protective factor against PTSD, but not depression, for women who had experienced certain negative responses to their first disclosure of sexual assault victimisation
Peter-Hagene and Ullman [54]	In a sample of women who had experienced sexual assault, women who had experienced high-violence or alcohol-related sexual assault had greater PTSD symptoms than those who had experienced moderate severity sexual assault. The effects of these assault categories on PTSD symptoms were mediated by character-related self-blame attributions and experiencing individuals turn against them following sexual assault disclosure.
Ullman and Peter-Hagene [60]	In a sample of adult survivors of sexual assault, negative initial and concurrent social reactions to disclosure were related to greater PTSD symptoms. Greater PTSD symptoms was, in turn, related to more negative social reactions.
Ullman and Relyea [61]	In a sample of female sexual assault survivors, associations between negative reactions to disclosure and maladaptive coping, and PTSS were found. Both PTSS and maladaptive coping were, in turn, associated with more negative reactions to disclosure.
Sigurvinsdottir and Ullman [26]	In a longitudinal study of women survivors of sexual assault, a number of factors, including more negative reactions to disclosure, and more positive reactions to disclosure were found to be associated with greater PTSD and depressive symptoms.

Study type 5: Mixed-methods study	
Rees [33]	In a sample of adult survivors of sexual violence with a current or past mental disorder, receiving negative responses to disclosure from family members or relatives (i.e. being ignored or not believed, being blame for the sexual violence or being threatened) were associated with the onset of subsequent mental disorder symptoms. The study also presented 2 vignettes that highlight how CSA, as well as negative responses from family members/relatives to disclosure of CSA, can lead to the onset of issues in adolescence, such as self-harm, suicidality, and eating disorders, as well as issues in adulthood, such as depression, panic disorder, and psychosis.

Table 6. List and summary of publications relating to Theme 6 (n=23)

Citation	Key Findings
Study type 2: Quantitative randomised controlled trial	
Badour and Feldner [83]	In this study of women with a history of sexual victimisation, a decline in feelings of disgust across repeated exposures to imagery of sexual trauma (as elicited by audio scripts) predicted a decline in PTSS among participants who also experienced a significant reduction in anxiety, but not among participants who only had a small decline in anxiety. The study highlights how emotional responses to sexual trauma cues, such as disgust and anxiety, can affect PTSD symptomatology.
Study type 3: Quantitative non-randomised study	
Bone, Goodfellow [92]	In a sample of risky drug users, those who had experienced sexual violence were more likely to experience depression compared to participants who had not experienced sexual violence.
Brooker and Tocque [93]	In a sample drawn from the Adult Psychiatric Morbidity Survey, participants who had been raped were more likely to have been admitted to a mental health ward, experience alcohol and drug dependency, and experience lifetime thoughts of suicide compared to participants who had not been raped. Participants who had experienced rape had the highest levels of anxiety/depression/other mental health issue (since the age of 16), agoraphobia, generalised anxiety disorder, obsessive compulsive disorder, probable psychosis, neurotic disorder and self-harm, when compared to participants who had not experienced sexual abuse or who had experienced sexual abuse that was not rape.
Bryan, Bryan [73]	In a study of military personnel and veterans, pre-military sexual trauma, and in particular, pre-military sexual assault, increased suicide risk. Military unwanted sexual experiences had the greatest effect on suicide risk for men, whilst premilitary sexual assault had the greatest effect on suicide risk for women.
Barnett and Maciel [84]	In this study of undergraduate women who have experienced sexual assault, both upward counterfactual thinking (i.e. thinking of preferable alternative outcomes) and downward counterfactual thinking (i.e. thinking

	about how things could have been worse) about the sexual assault was significantly associated with greater PTS.
Creech and Orchowski [6]	In a sample of women veterans receiving primary care, PTSD symptom severity increased as the number of lifetime sexual assaults increased. Experiencing sexual assault whilst in the military was more strongly associated with PTSD symptom severity than experiencing sexual assault in other time periods. Nevertheless, the study also found that women who had been sexually assaulted in the military, who had also experienced child sexual assault, had greater PTSD symptoms.
Dworkin [85]	In a meta-analysis of the prevalence of psychiatric disorders among people who have experienced sexual assault, mental health disorders (i.e. anxiety, bipolar disorder, depression, eating disorders, obsessive compulsive disorder, PTSD, substance use disorders) were more prevalent among survivors of sexual assault compared with people who had not been assaulted. Depressive disorders and PTSD were the most prevalent disorders among survivors.
Dworkin, Menon [86]	In a meta-analysis of the effect of sexual assault victimisation on psychopathology, sexual assault was associated with suicidality, obsessive-compulsive conditions, trauma and stress-related conditions, bipolar conditions, depression, anxiety, disordered eating, and substance abuse/dependence. The effects of sexual assault on psychopathology was larger in samples where there were a greater number of assaults that involved weapons, physical injury or stranger perpetrators, and smaller in studies that included attempted sexual assault in the definition of sexual assault.
Dworkin, Ojalehto [87]	In this study of undergraduate women survivors of sexual assault, greater social support from friends was found to be longitudinally associated with less severe PTSD. This association was stronger among survivors who did not engage in high levels of substance use coping.
Dworkin, Ullman [88]	In this study of undergraduate women survivors of sexual assault who reported experiencing PTSD, higher than average PTSD symptoms on a given day was associated with greater social support the next day. However, lower than average PTSD symptoms on the next day was also associated with greater social support on that day. Additionally, having higher than average PTSD symptoms on a given day were associated with greater PTSD symptoms the following day. Lower than average social support on the next day was also associated with more PTSD symptoms on that day. Individuals who had greater social support overall had less PTSD symptoms on a given day.
Ehlke and Kelley [94]	In this study of heterosexual female undergraduates, depression symptoms moderated the relationship between lifetime sexual coercion and drinking to cope motivations, which in turn was associated with greater alcohol use.
Fergus and Bardeen [89]	In this study of women who had experienced sexual trauma, difficulties tolerating negative emotions moderated the relationship between mental contamination and PTSS. Amongst women who were low in distress tolerance, greater mental contamination was associated with more PTSS.

Gilmore, Hahn [74]	In a sample of women who had received a sexual assault medical forensic exam, women who reported both prescription opioid use and prior sexual assault victimisation were at a greater risk of suicidal ideation.
Lamis, Cavanaugh [7]	In this study of African American women from low socioeconomic backgrounds, women who had experienced CSA were more likely to experience intimate partner sexual coercion, which in turn, increased their likelihood for experiencing suicidal ideation.
Shevlin, Mark Shevlin [95]	In a sample of prisoners, where the presence of psychosis was assessed using a proxy for probable psychosis, participants who had experienced sexual victimisation were more than 4 times more likely to have probable psychosis. Males and females did not differ significantly in terms of the relationship between sexual victimisation and psychosis.
Sigurvinsdottir and Ullman [26]	In this longitudinal study of women survivors of sexual assault, less social support, more negative reactions to sexual assault disclosure, less frequent social contact, more positive reactions to disclosure were associated with greater PTSD and depressive symptoms. Sexual revictimisation was also associated with greater depressive symptoms. Additionally, bisexual women were found to receive less social support than heterosexual women, which was in turn, associated with more depressive symptoms.
Sigurvinsdottir and Ullman [27]	In this longitudinal study of women survivors of sexual assault, bisexual women had greater PTSD and depressive symptoms than women survivors of sexual assault. Sexual orientation interacted with race such that Black bisexual women consistently had the highest levels of PTSD symptoms. This was followed by non-Black bisexual women, and then heterosexual women.
Smith, Cunningham [90]	LGB students are at a higher risk of sexual assault victimisation and experience higher rates of mental health issues such as depression and PTSD. Whilst there was no significant association between sexual assault and institutional betrayal, institutional betrayal was found to partially mediate the relationship between LGB status and PTSD and depression scores.
Ullman [37]	In this longitudinal study of women survivors of sexual assault, CSA was associated with more PTSD symptoms and problem drinking, and a greater risk of experiencing sexual revictimisation during follow-up. PTSD and problem drinking at baseline, partially mediated the relationship between CSA and sexual revictimisation. Additionally, sexual revictimisation partially mediated the relationship between PTSD at a given time point, and future PTSD.
Walsh, Koenen [91]	In a study of urban-dwelling African-Americans, individuals who had experienced sexual violence were 1.6 times more likely to have lifetime PTSD than those who had not experienced sexual violence.
White, Harris [62]	In a study of military personnel, pre-military sexual victimisation was associated with more lifetime suicide attempts.
Wolfe-Clark, Bryan [31]	In a sample of military personnel and veterans, participants who experienced MST and childhood sexual abuse, experienced greater

	symptoms of PTSD and depression compared to participants with no history of sexual victimisation.
Voller, Polusny [96]	In a sample of army veterans, lowered perceived self-efficacy was associated with more severe psychiatric symptoms amongst those who had experienced sexual trauma.

Table 7. List and summary of publications relating to Theme 7 (n=3)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Chang, Kaczkurkin [97]	In a sample of adolescents seeking treatment for sexual abuse, emotional regulation difficulties were significantly associated with PTSD and depressive symptoms.
Rabinovitch, Kerr [98]	In a sample of adolescent girls involved with the juvenile justice system, a history of childhood sexual abuse predicted lifetime suicide attempts and lifetime non-suicidal self-injury. Depressive and anxiety symptoms were not found to mediate the relationship between childhood sexual abuse and suicide attempts.
Study type 5: Mixed-methods study	
Rees [33]	In a study of women adult survivors of sexual violence with a current or past mental disorder, 2 vignettes of the temporal associations between the lifetime experiences of sexual abuse/assault of women adult survivors and mental disorder was presented. The vignettes revealed how receiving negative responses from relatives and family members following disclosure of CSA, can lead to the onset of mental illness symptoms, such as self-harm and suicidality, as well as mental disorders, such as eating disorders, in adolescence.

Table 8. List and summary of publications relating to Theme 8 (n=2)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Chaplo, Kerig [99]	Youth in the juvenile justice system who have experienced sexual abuse are at risk of higher rates of posttraumatic symptoms and self-injury. Girls who experienced sexual abuse also had higher rates of self-injury compared to boys.
Sanders, Hershberger [100]	In this study of juvenile-justice involved youth, PTSD symptoms mediated the relationship between sexual abuse and substance use, such that youth that reported a history of sexual abuse were more likely to report greater PTSD symptoms, which was in turn associated with greater drug and alcohol use. Gender did not moderate the relationship between sexual abuse and substance use.

Table 9. List and summary of publications relating to Theme 9 (n=6)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Agyapong, Juhas [101]	In this study of psychiatric outpatients, a range of sociodemographic and clinical factors including being female, having attained at most a high school education, having previously been known to psychiatric services, having a family history of mental illness and a history of substance use were associated with increased likelihood of having a history of CSA.
Cohn, Hagman [102]	In this study of women who have experienced rape, more severe daily PTSD symptoms were found to be indirectly associated with greater same-day alcohol consumption and desire to drink through the presence of more intense same-day NA distress. This relationship was stronger amongst women with an AUD diagnosis.
Kmett and Eack [104]	In this study of individuals with a serious mental illness in psychiatric inpatient care, 45% of participants were found to have experienced at least one sexual assault in their lifetime. Individuals who had been sexually abused were significantly more likely to be Caucasian, female, have been married, have children, and have a current diagnosis of depression, be a voluntary admission, and have a prior psychiatric hospitalisation than participants who had not been sexually abused. They were less likely to have a comorbid Axis 1 or substance use disorder. They also had significantly lower GAF scores, higher BPRS scores, a greater proportion of mental health professions in their social network, and a smaller proportion of family members in their social network.
Nelon, De Pedro [105]	In this national study of high school youth, youth of sexual (i.e. LGB) or racial (i.e. Asian, African American, Latino) status were at an elevated risk of experiencing co-occurring sexual victimisation, substance use and mental health issues.

Study type 4: Quantitative descriptive study	
Brooker, Tocque [103]	In a sample of adults attending a sexual assault centre, there was a high prevalence of mental health issues – 36% had moderate/severe depression, 40% had moderate/severe anxiety, 28% were drinking at hazardous levels, 12% had moderate/severe drug use, 45% had self-harmed.
Kintzle, Schuyler [106]	In a descriptive study of female veterans, just over three-quarters of women with probable PTSD reported experiencing sexual assault in the military. The majority of women who had experienced military sexual trauma reported that they had received mental health counselling in the last year.

Appendix 3 – Review Question 2 Findings

Table 1: List and summary of publications relating to Key Learning 1 (n=21)

Citation	Key findings
Study type 1: Qualitative study	
Bergman, Hamilton [108]	In a sample of Veterans Affairs primary care providers, participants identified barriers to delivering gender sensitive care, including there not being enough time in the appointment for patients to disclose their trauma histories, providers not feeling proficient in providing gender-sensitive care, and patient distrust of services.
Dognin, Sedlander [107]	In a sample of female veterans who had experienced sexual violence, participants discussed the impact of past trauma and how symptoms can be retriggered during medical procedures, particularly in relation to reproductive health. Participants expressed a desire for greater agency in relation to the control they have over their bodies. As such, service providers should deliver gender-sensitive care to survivors of sexual violence.
Grealy, Farmer [116]	Participants who worked with survivors of sexual abuse regularly used client-centred and trauma-informed approaches to promote participant safety, choice, collaboration, empowerment and trust.
Hegarty, Tarzia [122]	Study discusses trauma-informed care – see Key Learning 3.
Kehle-Forbes, Harwood [109]	In a sample of female veterans who had experienced military sexual assault, participants provided suggestions for improving gender-sensitive care for women who have experienced sexual violence. These include women-only treatment settings or support groups and training of medical professionals in delivering gender-sensitive care.
Koo, Nguyen [140]	In a sample of Asian American college women who were interviewed about a hypothetical sexual assault scenario, the authors identified that the participants' reactions to the scenario were influenced by their cultural experiences. As such, service providers should be culturally competent and understand that Western viewpoints may not resonate with all clients.
Monteith, Bahraini [112]	In a sample of veterans who experienced military sexual assault, 22% of participants expressed concern regarding continuity of care as they had to recount their trauma to multiple providers.

Quadara, Stathopoulos and Carson [144]	Study discusses trauma-informed care – see below.
Starzynski, Ullman [113]	In a sample of female survivors of sexual assault, participants identified a high turnover of therapists, victim-blaming attitudes and a lack of consistent care as barriers to help-seeking
Tarzia, Novy [123]	In a sample of women who experienced sexual assault and mental health problems, person-centred care which provides individualized support to survivors was discussed as important for recovery.
Study type 3: Quantitative non-randomized study	
Simon, Barnett [137]	In a study of children who had experienced sexual abuse and their caregivers, greater youth PTSD symptoms and caregiver stigma increased caregiver's motivation to seek treatment for their children. The authors discuss the importance of early intervention for reducing the potential negative psychosocial consequences associated with CSA.
Study type 4: Quantitative descriptive study	
Kintzle, Schuyler [106]	In a sample of female veterans who experienced military sexual assault, only a minority received care immediately after the incident. The authors discuss the importance of continuity of care and ensuring institutions such as the military foster acceptability of discussing issues such as sexual assault.
Study type 5: Mixed-methods study	
Fong, Bennett [111]	In a study of caregivers whose children had experienced sexual abuse, families were often retraumatized as they were required to recount their experienced to multiple services.
Rees, Simpson [117]	Survivors of sexual violence discussed the importance of practitioners using empowerment approaches, where survivors were heard, and their stories were believed.
Sawrikar and Katz [141]	The authors conducted a literature review on the support needs of survivors of childhood sexual abuse from cultural minority communities and highlighted the need for service providers to develop cultural competence and cultural knowledge in order to help survivors overcome the various cultural and non-cultural barriers to help-seeking that they face.
Strauss Swanson and Schroepfer [115]	In a sample of mental health practitioners, a number of strategies were employed to respond sexual abuse disclosure, including focusing on strengths, staying attuned to their client's needs, and encouraging the client to guide the conversation at their own pace.
Tarzia, Fooks [131]	Study discusses trauma-informed care – see Key Learning 3.

Other[5]	
Hegarty, Tarzia [124]	Study discusses trauma-informed care – see Key Learning 3.
Quadara [114]	In this review of the literature on trauma and consumer-informed approaches of service delivery and care, the need for better coordination, integration and links between services was highlighted as important to developing better responses for survivors of sexual violence with mental health problems.
Quadara and Hunter [133]	Study discusses trauma-informed care – see Key Learning 3.
Quadara, Stathopoulos [110]	Adult survivors of sexual abuse highlighted suggestions for future service provision to improve continuity of care, including online and telephone support and low-cost services that can be accessed on a long-term basis rather than short-term mental health care plans.

Table 2. List and summary of publications relating to Key Learning 2 (n=12)

Citation	Key Findings
Study type 1: Qualitative study	
Bergman, Hamilton [108]	The importance of primary care providers having access to mental health services for clients was discussed, and participants said it would be helpful to have mental health workers on site.
Grealy, Farmer [116]	Practitioners who worked with survivors of sexual abuse discussed the impact of funding cuts on services, especially for rural and Aboriginal and Torres Strait Islander communities.
Tarzia, Novy [123]	Sexual assault survivors emphasized that easy and ongoing access to trauma-informed services was crucial for their recovery.
Study type 3: Quantitative non-randomised study	
Eisenberg, Lust [121]	Study found that if a college had less sexual violence resources, survivors of sexual assault were significantly more likely to experience symptoms of anxiety, panic attacks and PTSD.
Holland, Rabelo [118]	In a sample of military personnel, perceived barriers to seeking mental health care was significantly associated with increased symptoms of PTSD and depression.
Study type 4: Quantitative descriptive study	
Kintzle, Schuyler [106]	In a sample of female veterans who experienced military sexual assault, only a minority reported receiving care immediately after the incident.
Manning, Majeed-Ariss [81]	In a study of clients who attended a sexual assault referral centre for a forensic medical examination, more than two-thirds (68.9%) reported a pre-existing mental health complaint. The authors

[5] Includes systematic reviews and literature reviews, which could not be appraised using the MMAT.

	discuss the importance of mental health referrals and services being available to assist these clients.
Study type 5: Mixed-methods study	
Brooker, Paul [120]	Forensic physicians discussed the challenges they faced in referring clients to mental health services, including limited resources, funding, and staffing.
Brooker and Durmaz [119]	In a study of sexual assault referral centres, practitioners discussed the challenges they experienced in accessing mental health services for their clients, including a lack of availability of services after hours.
Fong, Bennett [111]	Caregivers faced a number of barriers to accessing services for their children who had experienced sexual abuse, including a lack of availability of mental health providers, restrictions on and issues relating to health insurance, and the cost of accessing such services.
Tarzia, Fooks [131]	Practitioners who worked with survivors of sexual assault identified the availability of resources as crucial to delivering trauma-informed care.
Quadara, Stathopoulos [110]	In a sample of adult survivors of sexual assault, lack of availability of support services was a barrier to help seeking. The authors also identified a need for more services which cater to people from CALD backgrounds and the LGBTIQ+ community.

Table 3. List and summary of publications relating to Key Learning 3 (n=12)

Citation	Key Findings
Study type 1: Qualitative study	
Dognin, Sedlander [107]	In a sample of female veterans who had experienced sexual violence, past experiences of sexual violence and unresolved mental health issues often affected how participants interacted with health care teams. The authors identified a need for increased service provider understanding of the impact of past trauma on care.
Grealy, Farmer [116]	In a sample of practitioners who work with survivors of sexual abuse, trauma-informed approaches have a number of important principles which was reflected in participants' responses, including safety, choice, collaboration, empowerment, and trust.
Hegarty, Tarzia [122]	Clinicians from public hospitals, sexual assault centres, and mental health services identified factors that are important in the delivery of trauma-informed care for women who have experienced sexual violence and mental health issues. These factors included building strong relationships between mental health and sexual assault services, providing staff with training on trauma-informed care, developing a shared understanding and language of trauma-

	informed care across services, incorporating trauma-informed care into all levels of service, and strong leadership and governance.
Monteith, Bahraini [112]	In a sample of veterans who experienced military sexual assault, some participants reported a mistrust of services and feeling retraumatized when having to recount their experiences to multiple service providers. The authors suggest integrating trauma-informed care into Veterans Health Administration practice, so that mental health care is patient-centred while minimising the risk of re-traumatisation.
Quadara, Stathopoulos [144]	In a sample of adult survivors of institutional child sexual abuse and family members, survivors were usually met with supportive responses to their disclosure but still experienced poor mental health. Service providers should also work within a trauma-informed framework so that survivors and their families are not retraumatised when accessing services.
Tarzia, Novy [123]	In a sample of women who experienced sexual violence and mental illness, the integration of mental health and sexual assault services and the incorporation of trauma-informed approaches into all types of care were identified as key to their recovery.
Study type 3: Quantitative non-randomised study	
Simon, Barnett [137]	In this study of survivors of childhood sexual abuse and their caregivers, the authors concluded that families should be engaged in the treatment process and connected to trauma-informed assessment and intervention.
Study type 5: Mixed-methods study	
Tarzia, Fooks [131]	In this study of hospital staff, a number of factors were identified as important to the effective delivery of trauma-informed care, including but not limited to embedding trauma-informed care into staff's everyday work and the development of such care from the ground up, working together with other internal teams/departments and with external services, ensuring there are clear referral pathways, having stronger partnerships with external services, and providing staff with training and education on trauma-informed care.
Quadara, Stathopoulos [110]	In a sample of survivors of institutional child sexual abuse, family members of survivors, and service providers, trauma-informed services were considered important for recovery.
Other	
Hegarty, Tarzia [124]	The authors conducted a systematic review on intervention studies relevant to domestic and sexual violence in the context of primary care. While sexual violence interventions usually focused on trauma-informed care, this study concluded that there is a lack

	of rigorous evaluation of trauma-informed interventions for sexual violence.
Quadara [114]	The authors conducted a review of the literature on trauma-informed approaches to improve service delivery for sexual assault survivors who also experienced mental health issues. The review identified a lack of research to guide services in implementing and delivering trauma-informed care.
Quadara and Hunter [133]	The authors conducted a literature review on trauma-informed care and concluded that while the literature identified in their search provided consistent themes regarding the principles of trauma-informed care, there is little evaluative evidence to inform organisational and systemic change.

Table 4. List and summary of publications relating to Key Learning 4 (n=14)

Citation	Key Findings
Study type 1: Qualitative study	
Grealy, Farmer [116]	In a sample of practitioners who work with survivors of sexual abuse, practitioners were trained in a range of therapeutic approaches that are tailored to complex presentations and needs, including trauma-informed care.
Hegarty, Tarzia [122]	From their interviews with practitioners who work with survivors of sexual assault, the authors highlight the importance of providing practitioners with relevant education, training and resources on trauma-informed care and sensitive practice, and incorporating the input of women, and in particular women from diverse backgrounds, into these trainings.
Study type 4: Quantitative descriptive study	
Brooker, Tocque [129]	In a survey of mental health services, 100% of services reported that they regularly asked their clients about sexual abuse and violence. However, only 66% of staff reported being trained in asking about this.
Cochran [128]	In this study of sexual assault clinics, clients who were assessed as being at a high risk of suicide were appropriately discharged in only 22% of cases. The authors suggest that service providers need further education regarding the sense of urgency required to treat increased suicidality amongst people who have experienced sexual assault. Implementing standardised processes can assist in ensuring all clients receive equally appropriate care.
Mansfield, Meehan [127]	In their analysis of adult patient records from inpatient and community mental health services, the authors found that 37% of mental health practitioners reported asking their clients about potential childhood sexual abuse or sexual assault histories.
Paul and Paul [125]	In a sample of practitioners working with men who experienced sexual abuse, sexual abuse training and direct therapeutic

	experience were considered the most important factors for effective service delivery.
Wherry, Huey [130]	Practitioners working with survivors of child sexual abuse were surveyed about their training needs, which were ranked as follows: 1) understanding which treatments are effective; 2) recognising symptoms; 3) understanding which measures are helpful in diagnosing symptoms; 4) how to take care of oneself after hearing about abuse children experience; 5) making referrals to clinicians.
Study type 5: Mixed-methods study	
Brooker, Edmondson [126]	In a study of mental health services in the UK, only 7% reported having a strategy in place that addresses the needs of sexual assault survivors, and 32% reported training their staff in assessing trauma experienced by their clients, including sexual assault and sexual abuse.
Brooker, Paul [120]	In a study of forensic physicians working with survivors of sexual assault, 80% felt that they had the expertise to undertake a mental health assessment in their sexual assault referral centre. 80% reported they had the resources to provide a mental health assessment.
Tarzia, Fooks [131]	Staff working with survivors of sexual assault expressed a need for ongoing mandatory staff training and education that is tailored to staff's specific needs and experience levels.
Quadara, Stathopoulos [110]	In a sample of survivors of institutional child sexual abuse, family members of survivors, and service providers, opportunities for improved service delivery were identified, including education and training for service providers to help them understand factors associated with child sexual abuse and help them develop greater awareness of survivor's experiences.
Sawrikar and Katz [141]	In their review of the literature on the treatment needs of survivors of child sexual assault from cultural minority communities, the authors conclude that service providers should be trained in delivering culturally-competent and culturally-sensitive services.
Strauss Swanson and Schroepfer [115]	In a sample of mental health professionals, a lack of training in responding to disclosures of sexual assault or sexual abuse could potentially impact the quality of service provided by the practitioners.
Other	
Quadara and Hunter [133]	In their review of the literature on trauma-informed care, the authors conclude that individual practitioners should receive training in providing trauma-informed care.

Table 5. List and summary of publications relating to Key Learning 5 (n=10)

Citation	Key Findings
Study type 1: Qualitative study	
Grealy, Farmer [116]	In a sample of practitioners who work with survivors of sexual abuse, effective responses were often characterised by skilled support coordination and carefully designed referral to other services.
Hegarty, Tarzia [122]	Clinicians from public hospitals, sexual assault centres, and mental health services identified a need for improved service integration and coordination of internal and external referrals.
Tarzia, Novy [123]	Survivors highlighted that better integration between mental health and sexual violence services, such as information sharing and having practitioners working in the same location, would be helpful in facilitating their recovery.
Study type 5: Mixed-methods study	
Brooker, Edmondson [126]	In this study of mental health services in the UK, only 16% reported having a formal referral pathway with a sexual assault service.
Brooker and Durmaz [119]	In a study of sexual assault referral centres, two thirds of participating services reported challenges in referring their clients to mental health services due to a lack of referral pathways and a lack of partnerships between sexual assault and mental health services.
Tarzia, Fooks [131]	Interviews with health practitioners highlighted that strengthening communication and integration between services is fundamental to providing trauma-informed care and improving outcomes for people affected by sexual assault and sexual abuse.
Powell, Westera [135]	In their analysis of child sexual abuse court cases, the authors discuss the importance of coordinated and multidisciplinary responses from police, child protection, and mental health services.
Quadara, Stathopoulos [110]	In this study of survivors of child sexual abuse and caregivers of survivors, bureaucratic, rule-oriented and fragmented service systems were found to impede survivor's access to care
Wherry, Huey [130]	In a sample of practitioners working with children who experienced sexual abuse, an average of 76.15% of clients were referred for psychological therapy, but only 29.97% are referred internally, highlighting that services were largely reliant on their established referral pathways with services in the community.
Other	
Quadara and Hunter [133]	In their literature review of trauma-informed care and child sexual abuse, the authors highlight the need for system change which

	addresses the fragmented and uncoordinated systems of care individuals experience when accessing mental health services

Table 6. List and summary of publications relating to Key Learning 6 (n=5)

Citation	Key Findings
Study type 1: Qualitative study	
Grealy, Farmer [116]	In a sample of practitioners who work with survivors of sexual abuse, practitioners attended to the full range of survivor's needs, rather than just pathologizing their mental health symptoms. They also highlighted that survivors often have complex needs, and recovery cannot occur without addressing the person's related social, emotional and physical health needs.
Tarzia, Novy [123]	Women with a lived experience of sexual violence expressed the need for services that address their complex issues, as well as services to support women from diverse backgrounds. However, holistic models were often lacking from services.
Study type 4: Quantitative descriptive study	
Kirkner, Relyea [82]	In a sample of female sexual assault survivors, PTSD symptoms, education and supportive reactions were associated with greater odds of survivors seeking mental health treatment. However, participants with co-occurring PTSD problems were less likely to seek substance use treatment. The authors suggest that both community and professional treatment resources are needed to address women's diverse needs and support their recovery.
Study type 5: Mixed-methods study	
Tarzia, Fooks [131]	Consultations with service providers highlighted the challenges they face in supporting women with multiple compounding issues, such as family violence and drug and alcohol problems.
Other	
Quadara and Hunter [133]	In their literature review of trauma-informed care, the authors discuss holistic models of healing, in which service providers are responsible for creating environments that are conducive to recovery by providing survivors with autonomy, self-determination and respect.

Table 7. List and summary of publications relating to Key Learning 7 (n=7)

Citation	Key Findings
Study type 1: Qualitative study	
Gekoski, Davidson [134]	Taking into account the perspectives of survivors of child sexual abuse, criminal justice and child protection systems have been described as confusing and distressing by survivors, and the length of time spent waiting to go to court can exacerbate their mental health symptoms
Hegarty, Tarzia [122]	The authors incorporated the perspectives of women with a lived experience of mental health problems and sexual violence and practitioner insight to develop the Health Systems Implementation Model. The model, which can be used alongside existing health and violence service frameworks, comprises of four key elements: 1) relationship building within and between services; 2) integrated coordinated care; 3) reflexive monitoring; 4) regular environment and workplace scans of services. Such an approach could address the barriers to help-seeking already identified and enhance the provision of trauma-informed care within the health system
Kehle-Forbes, Harwood [109]	In a sample of female veterans, some participants with a history of military sexual assault and posttraumatic stress symptoms felt uncomfortable and unwelcome in VHA facilities. Some participants made suggestions for improvement, including gender-specific programs.
Study type 3: Quantitative non-randomised study	
Kirkner, Relyea [82]	In a sample of sexual assault survivors, PTSD symptoms, education and supportive reactions were associated with greater odds of survivors seeking mental health treatment. However, participants with co-occurring PTSD problems were less likely to seek substance use treatment. Services may require innovative ways to engage with community-residing survivors not already in treatment settings or formally diagnosed with dual disorders.
Simon, Barnett [137]	The authors discuss the Child Advocacy Centre (CAC) model, which was developed in response to failures of traditional law enforcement and child protection practices in working with survivors of childhood sexual abuse.
Other	
Hegarty, Tarzia [124]	The authors express concern regarding the lack of specific trauma-informed services for survivors of sexual violence. They argue that there is a tendency for sexual violence to be peripherally addressed by DV interventions, which may not be suitable for women assaulted by a stranger.
Herbert and Bromfield [136]	This systematic review of the research on the efficacy of the CAC model provided some support for the potential for the model to

	improve the mental health and psychological outcomes of survivors of child sexual abuse. Overall, however, the review highlighted a lack of research on whether CACs are more effective than other practices in reducing systemic trauma amongst survivors.
Quadara and Hunter [133]	The authors discuss how important principles of care and service delivery, including trauma-informed care, can be implemented in residential care settings. Therapeutic residential care programs aim to provide a safe and healing environment for young people, responding to the complex impacts of abuse and neglect, including sexual abuse. They also discuss Aboriginal and Torres Strait Islander healing programs, which can assist communities in recovering from the psychological impacts of trauma, including sexual abuse and sexual assault.

Table 8. List and summary of publications relating to Key Learning 8 (n=10)

Citation	Key Findings
Study type 1: Qualitative study	
Koo, Nguyen [140]	In a sample of Asian American college women, the institutional, sociocultural and psychological contexts of rape disclosure were identified using semi-structured interviews. Barriers to disclosure included stigma around mental health support seeking, emotional avoidance as a way of coping with rape, and fears that their personal relationship would be adversely affected by disclosure. The authors suggest that support for rape should be culturally-sensitive.
Quadara, Stathopoulos [144]	In a sample of adult survivors of institutional child sexual abuse and family members, survivors were usually met with supportive responses to their disclosure but still experienced poor mental health. The authors conclude that service providers should work within a family systems framework, especially when understanding the dynamics surrounding the disclosure.
Study type 3: Quantitative non-randomised study	
Bhuptani, Kaufman [65]	In this study of female adult sexual assault survivors, receiving victim-blaming responses following rape disclosure was associated with greater depressive symptoms through rape-related shame and avoidance. Practitioners should provide a supportive environment for the discussion of rape-related shame to facilitate healing.
DeCou, Cole [44]	In a sample of undergraduate students, shame related to the experience of sexual assault significantly mediated the relationship between negative reactions to disclosure and symptoms of depression and PTSD. As such, the authors suggest

	that assault-related shame should be a target of therapeutic intervention.
Hakimi, Bryant-Davis [49]	In a sample of females who had experienced sexual assault, negative social reactions to disclosure were significantly associated with PTSD and depression symptoms across racial groups. The authors suggest that across racial groups, service providers should assist survivors in identifying and cultivating relationships with people who are supportive of their recovery.
Nikulina, Bautista [53]	In this study of undergraduate women, a greater sense of cultural identity was found to be a protective factor against PTSD for women who had experienced certain negative responses to their first disclosure of sexual assault victimisation. The authors suggest that practitioners focus on cultural competence and understand the survivor's post-assault experiences within their cultural context.
Schry, Hibberd [138]	In a sample of military veterans, those who experienced military sexual assault reported significantly higher levels of PTSD symptoms, depression symptoms, higher suicidality, and higher rates of outpatient mental health treatment compared to veterans who did not experience military sexual assault. The study also highlights that military sexual assault is an issue that also affects men, and male sexual assault survivors may be reluctant to discuss this with service providers. As such, risk assessment, safety planning, and ongoing monitoring of mental health conditions is important for male veterans.
Study type 5: Mixed methods study	
Carson, Babad [139]	In a sample of undergraduate females who had experienced sexual assault, participants who did not disclose the experience due to minimisation or had less shame had significantly fewer PTSD symptoms compared to participants who disclosed the experience. Difficulty seeking support may be associated with shame and victim blaming.
Strauss Swanson and Schroepfer [115]	In this study of mental health professionals' reactions to sexual assault disclosures from female clients with serious mental illness, the majority of participants reported feeling unsure of their ability to effectively respond to disclosure. Fears relating to potentially upsetting or retraumatising clients and being uncertain about how to effectively respond were identified as factors that influence their lack of confidence in responding.
Tarzia, Fooks [131]	Practitioners discussed the importance of creating opportunities for women to disclose experiences of sexual violence, finding the right moment to bring up topic, building trust with women, providing warm referrals to services, and accompanying women to services.

Table 9. List and summary of publications relating to Key Learning 9 (n=5)

Citation	Key Findings
Study type 3: Quantitative non-randomised study	
Guha, Luebbers [22]	The authors examined the forensic medical records of childhood sexual abuse survivors and linked these records to medical data. They found that survivors of childhood sexual abuse had significantly increased levels of attendance at psychiatrists, psychologists and clinical social workers compared to a matched comparison sample who had not experienced sexual abuse
Holland, Rabelo [118]	The authors discuss the importance of institutions, such as the military, understanding that sexual assault can occur within the institution. As such, leaders should openly discuss the issue of sexual assault and provide resources for survivors.
Study type 4: Quantitative descriptive study	
Manning, Majeed-Ariss [81]	The authors analysed the client notes of a sexual assault referral centre in the UK and found that 68.9% of adult clients had reported a pre-existing mental health condition.
Study type 4: Mixed methods study	
Brooker and Durmaz [119]	40% of the clients attending a sexual assault referral centre were already known to mental health services. As such, sexual assault workers should be mindful that their clients are likely to experience mental health symptoms and provide referrals accordingly.
Powell, Westera [135]	The authors argue that the criminal justice should pay more attention to the mental health needs of survivors of childhood sexual abuse by understanding how trauma can impact their re-telling of the experience and offering survivors alternative methods of giving evidence at trial.