

Review: Crisis responses for children and young people – a systematic review of effectiveness, experiences and service organisation (CAMH-Crisis)

Deborah Edwards¹, Judith Carrier¹, Judit Csontos¹, Nicola Evans¹, Mair Elliott², Elizabeth Gillen¹, Ben Hannigan¹, Rhiannon Lane¹ & Liz Williams²

¹School of Healthcare Sciences, College of Biomedical and Life Sciences, Cardiff University, Cardiff, UK

²Independent Service User Researcher, Cardiff, UK

Background: In England, one in six children aged 5–19 has a probable diagnosable mental health disorder. This is a major public health problem, with multiple agencies adopting varying approaches to care delivery for children and young people (CYP) in crisis. **Objectives:** To examine the organisation of crisis services across education, health, social care and voluntary sectors; the experiences and perceptions of CYP, families and staff; the effectiveness of current approaches to care and the goals of crisis intervention. **Methods:** A systematic review of all relevant English language evidence regarding the provision and receipt of crisis support for CYP aged 5–25 (PROSPERO-CRD42019160134). Seventeen databases were searched from 1995 to 2002 and relevant UK-only grey literature was identified. Critical appraisal was conducted using appropriate design specific appraisal tools. A narrative approach to synthesis was conducted. **Results:** In total, 138 reports (48 reports covering 42 primary research studies; 36 reports covering 39 descriptive accounts of the organisation services and 54 UK-only grey literature reports) were included. The evidence suggests that crisis services were organised as follows: triage/assessment-only, digitally mediated support approaches, and intervention approaches and models. When looking at experiences of crisis care, four themes were identified: (a) barriers and facilitators to seeking and accessing appropriate support; (b) what children and young people want from crisis services; (c) children's, young people's and families' experiences of crisis services; and (d) service provision. In determining effectiveness, the findings are summarised by type of service and were generated from single heterogeneous studies. The goals of crisis services were identified. **Discussion:** Despite a lack of high-quality international studies, findings suggest that support prior to reaching crisis point is important. From this work, various aspects of crisis care have been identified that can be incorporated into existing services across education, health, social care and the voluntary sector.

Key Practitioner Message

- Due to rising demand and increasing healthcare waiting times, more CYP present at mental health services at crisis point. To improve care, it is important to understand the types of mental health crisis services and how CYP and their families experience support at these facilities.
- Findings from this systematic review indicate that CYP and their families are often unaware of available mental health services and how to access them. Children and young people should be involved in the development of public information about mental health services.
- Mental health support needs to be provided through different mechanisms such as face-to-face appointments, text, email or telephone via a direct line with round-the-clock availability.
- Emergency departments (EDs) are often accessed at crisis point. EDs work well where care is provided in a calm and private environment by trained staff with experience in children's and young people's mental health.
- Improving accessible community based early interventions with clear pathways to designated clinical services might prevent CYP reaching mental health crises.

Keywords: Adolescence; childhood; crisis intervention; mental disorders; systematic review

Introduction

In 2021, it was estimated that worldwide one in seven 10–19-year-olds has mental health problems, approximately 14% of adolescents, with depression, anxiety and behavioural disorders among the leading diagnoses

(WHO, 2021a, 2022). Regarding younger age groups, 8% of 5–9-year-olds experience mental disorder globally (WHO, 2022). In 2020, one in six children aged 5–19 in England, UK, had a probable mental health disorder, increased from one in nine in 2017 (NHS Digital, 2020). Furthermore, the number of CYP experiencing mental

health crises is increasing. In the United States, between March and October 2020, 24% more children aged 5–11 and 31% more adolescents aged 12–17 attended EDs due to mental health issues compared with 2019 (Leeb et al., 2020). In Canada, one in four hospitalisations for CYP between the age of 5 and 24 was due to mental health issues in 2020, and a local children's helpline reported that interactions also doubled during the same period (Canadian Institute for Health Information, 2022). In England, there was a 29% increase in CYP's contact with mental health services, a significant increase in eating disorders and a 47% increase in new emergency referrals to crisis care teams for under 18-year-olds between December 2019 and April 2021 (Lewis, 2021). The COVID-19 pandemic is partially responsible for this increase, as CYP has been disproportionately affected by school and university closures, with disrupted routines and social connection, leading to anxiety and uncertainty fuelled by isolation and loneliness (WHO, 2022). Moreover, CYP might have experienced increased family stress and domestic abuse during the long periods of at home stay, leading to mental health problems (WHO, 2022). UNICEF estimates that at least one in seven children has been directly affected by lockdowns globally (UNICEF, 2021). In England, a model designed to assist local organisations meeting the mental health needs of both adults and CYP predicted that 10 million people will need extra mental health support because of the COVID-19 pandemic, with 1.5 million of these being CYP under the age of 18 (O'Shea, 2020).

However, due to stretched services and increasing demand, CYP have often been waiting lengthy periods to be seen leading to rising numbers seeking help or having help sought on their behalf during mental health crises (National Assembly for Wales Children Young People and Education Committee, 2018; NHS England & DoH, 2018). Despite falls in median and maximum waiting times since 2015, an Education Policy Institute report identified that average wait to treatment exceeded the UK government's goal of 4 weeks (Crenna-Jennings & Hutchinson, 2020). A Local Government Association report indicated that in 2018, only 20% of CYP started treatment within 4 weeks, with some waiting up to 82 days (LGA, 2022). For some providers, the longest waiting times were over a year which often affected vulnerable children who faced barriers to engaging with services (Crenna-Jennings & Hutchinson, 2020). Moreover, a Care Quality Commission review of CYP mental health services in the United Kingdom found that "too often" referrals were rejected due to inappropriately high eligibility thresholds, resulting in CYP not accessing the right support until they are "at the point of crisis" (CQC, 2018). The House of Commons Health and Social Care Committee (2021) has also concluded that as demand further increases and resources become more stretched, smaller and manageable problems may be escalated to crisis point due to this combination of long waiting lists and high thresholds to access care.

There are several organisations that might respond to CYP at times of mental health crisis, including children's mental health services, hospital EDs, pastoral or counselling staff in schools, voluntary organisations through internet or telephone-based counselling and the police. These include designated clinical services (such as local child and adolescent mental health

services (CAMHS) teams and/or dedicated CAMHS crisis teams). However, funding and service provision decisions made in one part of the health system can have unintended consequences for other parts, for example if CYP and their families cannot access initial mental health support and their condition is escalated to crisis point, this further drives the demand on EDs (CQC, 2018; Lewis, 2021).

In the UK context, CAMHS are often unable to meet the needs of the high numbers of CYP in crisis, meaning it is likely that a substantial proportion of crisis responses occur outside of the National Health Service (NHS) (CQC, 2019). As non-NHS settings may be more frequent points of access to crisis support, it is important to understand how these systems interact with designated mental health services, how these different response types are experienced by CYP and their families and what their outcomes are (CQC, 2019). For example, a recent report revealed that the highest number of referrals to children's mental health services for 16 and 17-year-olds comes from the police, while the second highest source of referral for those under 18 is education (Pona & Turner, 2018). There have also been increasing reports of mental health problems and self-harm from teachers (ASCL & NCB, 2016) and from voluntary organisations in frontline contact with children and adolescents (Young Minds, 2018).

Crisis care for CYP has become a policy priority both UK-wide (National Assembly for Wales Children Young People and Education Committee, 2018; NHS England, 2019; WG, 2022) and internationally (WHO, 2021b). In England, out-of-hours and crisis services for CYP have been a policy priority (MHT, 2016; NHS England & DoH, 2018) with model service specifications including expectations that NHS trusts provide round-the-clock home-based crisis care (NHS England, 2019). Responding appropriately to CYP in crisis has also featured in recent national Crisis Care Concordats (HM Government, 2014; WG, 2019). Tackling the high suicide rates in CYP and increasing access to emergency mental health care are also priorities for the World Health Organization (WHO, 2019).

Despite the prioritisation of crisis care for CYP, no up-to-date data are available on types of service responses and their organisation; CYP's, their families' and staff's experiences; and service outcomes. Previous reviews have focused specifically on the provision of designated clinical services for those in mental health crisis, (Hamm et al., 2010; Janssens, Hayen, Walraven, Leys, & Deboutte, 2013; Lamb, 2009; Shepperd et al., 2008) neglecting the diverse settings where CYP are likely to access initial crisis support outside of the mental health system (e.g. schools, online networks, social media, crisis helplines, EDs, voluntary organisations, criminal justice system). Shepperd et al. (2008) brought together evidence for alternatives to inpatient mental health services for CYP and mapped provision at the time. In this review, 'crisis care' was included alongside other types of non-hospital care for CYP with 'complex mental health needs'. Hamm et al. (2010) limited their review to ED interventions whilst Janssens et al. (2013) reviewed the organisation of mental health emergency care for CYP noting a lack of clarity around terminology. The conclusions that were made across all of these reviews was that the research into CYP mental health crisis care is

underdeveloped and of variable quality with little detail provided as to the nature of crisis service provision.

In the context of such high levels of need and in view of the urgency of this issue, it is vital that the care being provided to CYP in crisis is evidence-based and effective. The aim of this review is therefore to investigate the evidence underpinning such responses. Since the development of the initial proposal for this study, the world has been affected by the COVID-19 pandemic. Initial studies have found that CYP's mental health has been affected by the stress associated with both COVID itself and lockdowns, particularly in those CYP with specific additional vulnerabilities such as pre-existing mental health conditions or being quarantined due to infection/fear of infection (Singh et al., 2020). However, this study pre-dated the pandemic and is not drawing on any of the COVID-related literature.

Methods

This systematic review followed the CRD's guidance (CRD, 2009) and was informed by EPPI Centre methods (Gough, Oliver, & Thomas, 2017). To ensure rigour, the reporting adheres to the PRISMA guidance (Page et al., 2021), and the protocol was registered (PROSPERO-CRD42019160134).

The specific objectives were

- 1 To investigate the organisation of crisis services for CYP aged 5–25 years, across education, health, social care and voluntary sector.
- 2 To investigate the experiences and perceptions of CYP, their families and staff regarding mental health crisis support for CYP aged 5–25 years.
- 3 To determine the effectiveness of current models of mental health crisis support for CYP.
- 4 To determine the goals of crisis intervention.

Murphy et al. (2015) describe a crisis response for adults as providing immediate risk management and stabilisation of individuals experiencing an acute mental health crisis by a designated team of experienced health care professionals operating 24 hr a day, 7 days a week.

For the purposes of this review, we provide a broader definition of crisis and consider a crisis service for CYP to be the provision of a service in response to extreme psychosocial distress, which for CYP may be provided in any location such as an ED, a specialist or non-specialist community service, a school, a college, a university, a youth group or via a crisis support line. This may also include inpatient hospital services.

The PICOS/PiCo framework was used to guide the inclusion criteria on population (P), intervention/phenomena of interest (I), comparators (C), outcome (O), study design (S) and context (Co) are displayed in Table 1.

Searching

A comprehensive search strategy was designed by an information specialist with input from the project team and the project stakeholder advisory group (SAG). The preliminary keywords that were used to inform these searches included 'child' OR 'adolescent' AND 'CAMHS' OR 'mental health' AND 'crisis'. The final search strategy was tailored for each of the 17 databases (see Appendix S1) from database inception and undertaken between February and April 2020 (updated in January 2021) for English language publications.

The databases searched were MEDLINE ALL, PsycINFO, EmCare, AMED, HMIC, CINAHL, ERIC, ASSIA; Sociological Abstracts; Social Services Abstracts; PQDT Open, Scopus; Web of Science; Open Grey; CENTRAL; ETHOS and Criminal Justice Abstracts. Supplementary searches were undertaken of

organisational websites (with input from the SAG), advanced google search, handsearching the contents pages of the last 2 years of key journals, checking the reference lists of included studies and forward citation tracking performed using Web of Science (see Appendix S2).

Screening

EndNote X20™ was used to manage the citations and remove duplicates. Two reviewers (DE, NE, JCa, BH and RL) independently conducted title and abstract screening using the software package Covidence™, and any disagreements were resolved by a third reviewer. Full-text screening was undertaken using a purposefully designed form, which had been piloted before, completed independently by two reviewers with disagreements resolved by a third reviewer.

Quality appraisal

The methodological quality of all the research reports (not the descriptive accounts of organisation/models of crisis services or the UK-only grey literature) was assessed by two reviewers (DE, NE, JCa, BH and RL), and any disagreements were resolved through discussion with a third reviewer. The checklists used were the CASP checklist for RCTs (CASP, 2018), JBI checklist for Quasi-Experimental Studies (non-randomised experimental studies) (Tufanaru, Munn, Aromataris, Campbell, & Hopp, 2017), SIGN Methodology Checklist 3: Cohort Studies (SIGN, 2019), SURE checklist for descriptive cross-sectional studies (SURE, 2018) and the CASP checklist for qualitative studies (CASP, 2018). Tables of the quality appraisal scores including records excluded on appraisal are presented in Appendix S3. Of the four RCTs only one scored highly on all appraisal criteria, with three of the four quasi-experimental studies scoring highly. All 13 of the cohort studies were assessed as of acceptable quality, with nine of the 10 descriptive cross-sectional studies found to meet the majority of quality criteria. All 10 qualitative studies met the majority of quality assessment criteria.

Data extraction, analysis and synthesis

The data extracted (aim, nature of crisis, type and location of treatment, participant details, recruitment age, gender, ethnicity, intervention or programme, data sources, outcomes and outcome measures) were added directly into tables by one reviewer and checked by a second. When multiple research reports were identified from the same study, data were extracted and reported as a single study. Data extraction, analysis and synthesis for each of the four objectives were conducted separately, and the software package NVIVO-12™ was used to aid this process.

Data relating to the organisation of crisis services from primary research (objective 1), descriptive accounts and UK-only grey literature documents were synthesised using a narrative approach that involved the development of thematic summaries (Gough et al., 2017). Natural groups of studies that investigated the same areas were brought together into meaningful sections, forming the final thematic summaries. This was led by DE and checked by BH.

To investigate experiences and perceptions (objective 2), all qualitative data were synthesised and a thematic synthesis (Thomas & Harden, 2008) was conducted. Using NVIVO, inductive data-driven codes were generated through line-by-line reading of each document in line with each of the research objective. The codes were then grouped into themes and sub-themes, performed by RL and checked by DE. The CERQUAL approach was used to assess the confidence of the synthesised findings (Lewin et al., 2015), led by DE and checked by NE.

The third objective was to determine the effectiveness of current models of mental health crisis. Due to the heterogeneity of the included intervention studies, meta-analyses could not be performed, and thematic summaries as described above were conducted. This was led by DE and checked by JC and NE. The GRADE approach was used to assess the confidence in the synthesised findings (Guyatt et al., 2008).

Table 1. Eligibility criteria

PICO	Inclusion	Exclusion
Population	CYP (aged 5–25) in emotional/mental health crisis.	Studies where the average age of participants is over 25 years Under 5 s
Intervention and phenomena of interest	Crisis services and responses	Usual care provided at EDs with no specific mental health component Standard CAMHS care/long term support, not at the point of crisis Where crisis is a group crisis experience such as a mass shooting or stabbing in an educational establishment or a natural disaster Evidence related to adult mental health services, where there is no designated provision for young people
Comparators	None	
Outcomes	Organisation of crisis services, their effectiveness (all outcomes as described across the primary studies); the experiences of CYP and families and, the goals of crisis services.	
Context	Any setting (community and hospital services), including virtual	
Study design	Quantitative and qualitative research, and	
Types of evidence	UK-only grey literature	

Outcome data were only available for results that arose from single studies due to heterogeneity of the different interventions within similar settings. Therefore, guidance was followed on undertaking the GRADE for data of this type (Ryan & Hill, 2016).

To determine the goals of crisis intervention (objective 4), thematic summaries as described above were employed by BH and checked by DE and NE.

Results

The flow of records is displayed in the PRISMA flowchart (Page et al., 2021) in Figure 1. Reports excluded on full text are reported in Appendix S4. One-hundred and thirty-eight reports were included, which consisted of 48 reports covering 42 primary research studies (see Appendix S5), 36 reports covering 39 descriptive accounts of the organisation services and 54 UK-only grey literature reports.

Description of included studies

The 31 quantitative and 11 qualitative research studies were conducted within the USA ($n = 25$), Canada ($n = 8$), United Kingdom ($n = 3$), Australia ($n = 2$), Ireland ($n = 1$), The Netherlands ($n = 1$), New Zealand ($n = 1$) and Sweden ($n = 1$). The descriptive accounts of the organisation of crisis services were mainly from the USA ($n = 19$), Canada ($n = 10$), Australia ($n = 3$), Germany ($n = 1$), Switzerland ($n = 1$), The Netherlands ($n = 1$) and the United Kingdom ($n = 1$). The participants were mainly CYP experiencing or had experienced a crisis and/or their family members ($n = 39$), youth counsellors (Hazell, 2003), staff members from project sites (Garcia, Vasiliou, & Penketh, 2007) or ED medical staff (Dion, Kennedy, Cloutier, & Gray, 2010; RCEM, 2018). Participant group sizes for CYP ranged from 2 (Hazell, 2003) to 2532 (Fendrich et al., 2019). Some studies did not identify CYP's age, labelling them as adolescents (Greenfield,

Hechtman, & Tremblay, 1995), young people (Hazell, 2003), child psychiatry patients (Reliford & Adebajo, 2018), elementary school students (Walter, Kaye, Dennery, & DeMaso, 2019) or high school students (Capps, Michael, & Jameson, 2019; Michael et al., 2015; Sale, Michael, Egam, Stevens, & Massey, 2014; Walter et al., 2019). Three studies only included young people aged over 16 (16–24 years) (Idenfors, Kullgren, & Salander, 2015), 16–25 years (Garcia et al., 2007), 18–25 years (Narendorf et al., 2017). The majority of research studies included a mix of male and female CYP, although one study included male CYP only (Baker & Dale, 2002) and a further study (across two reports) included female CYP only (Rotheram-Borus et al., 1996; Rotheram-Borus, Piacentini, Cantwell, Belin, & Song, 2000). Seven studies did not report CYP's gender (Garcia et al., 2007; Greenfield et al., 1995; Haxell, 2015; Liegghio & Jaswal, 2015; Maslow et al., 2017; Reliford & Adebajo, 2018; Walter et al., 2019).

Objective 1: Organisation of crisis services

The first objective was to present the best available evidence on the organisation of crisis services for CYP aged 5–25 years, across education, health, social care and the voluntary sector.

Characteristics of different approaches to services

The full detail can be found in Appendix S6, but in summary, the services include: triage/assessment-only; digitally mediated support approaches; and intervention approaches and models. Triage/assessment approaches include responses to CYP presenting in times of crisis to EDs, educational settings, telephone triage and to out-of-hours psychiatric emergency services. Digitally mediated support approaches are facilitated through telephone and/or text-based responses or online technology. Intervention approaches and models range

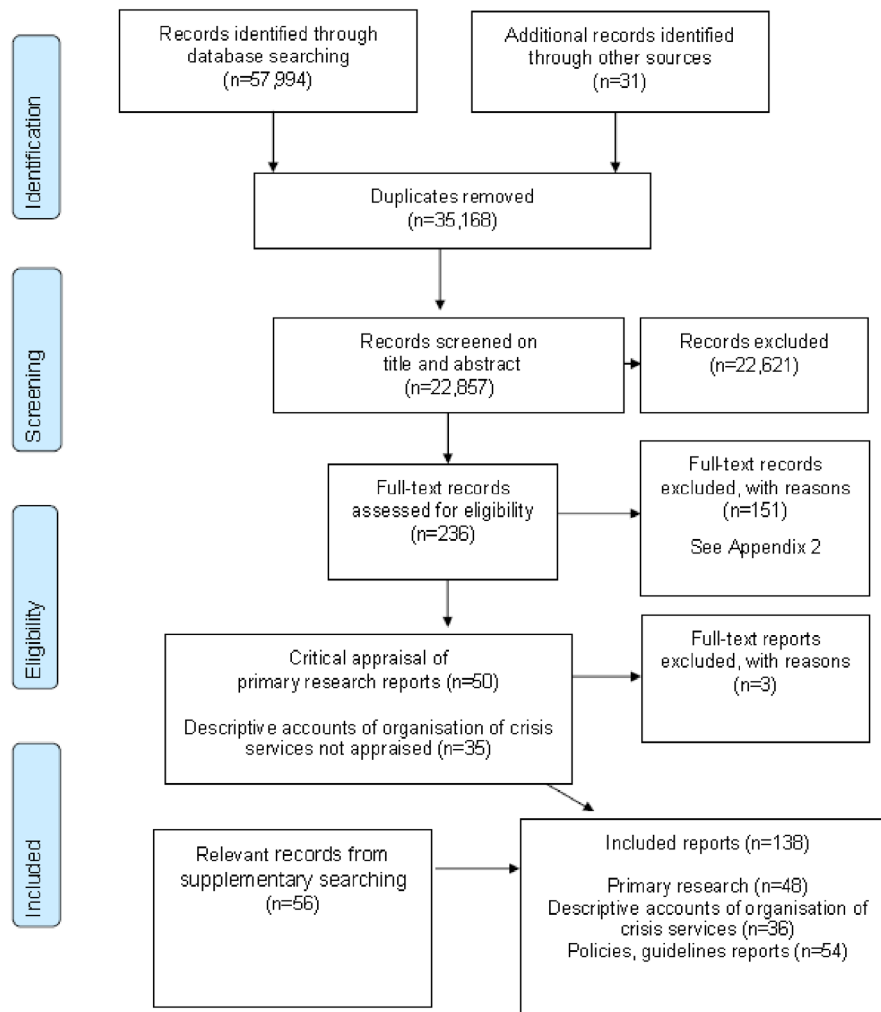


Figure 1. PRISMA flow diagram

from treatment that is started in the ED then moved to outpatient services, inpatient care through hospitals or residential treatment centres, home-based programmes, CAMHS-based services, treatment involving telepsychiatry or via a community resource such as mobile outreach through to school/hospital partnerships and generic walk-in crisis services provided by voluntary organisations.

Thematic summaries

Four thematic summaries were developed based on the descriptive reports and UK-only grey literature documents. These were (a) recommendations for initial assessment in the ED; (b) the importance of providing home or community-based crisis support; (c) places of safety; and (d) general characteristics of a crisis response.

Recommendations for initial assessment in the emergency department. This theme highlights that initial assessments in the ED should be undertaken in separate age-appropriate areas by skilled professionals with appropriate training and expertise with CYP. It was found that guidance relating to how initial assessments are carried out in the ED also focuses on risk assessments and broadly follows NICE guidelines, and the importance of follow-up pathways is emphasised.

The importance of providing home or community-based crisis support. This theme identified that where possible, crisis care should be offered as close to where CYP live as possible, so either in the home or in community-based locations, recognising that families make an important contribution to the planning and provision of care.

Places of safety. This theme identified that places of safety need to be appropriately staffed with experienced and trained professionals, ideally in a dedicated space so that the use of adult mental health facilities and police cells can be avoided.

General characteristics of a crisis response. This theme highlights that, in general, crisis services should provide a timely response, be age-appropriate, have a single point of access, be accessible and available 24/7, be responsive and needs-led, involve multi-agency working, be staffed by suitably qualified and experienced professionals and involve crisis planning and risk assessment using evidence-based practice.

Objective 2: Experiences and perceptions of crisis support

The second objective explored both the experiences and perceptions of CYP, aged 5–25 years of age, their families,

stakeholders and service providers regarding crisis support within mental health. Four themes were identified, using thematic analysis of the qualitative data and these were: (a) barriers and facilitators to seeking and accessing appropriate support; (b) what children and young people want from crisis services; (c) children's, young people's and families' experiences of crisis services; and (d) the challenges of service provision. The qualitative findings were assessed for confidence using the CERQual approach (see Appendix S7). Out of the 27 synthesis summary statements generated, only two were judged as having a high degree of confidence. The remaining statements were judged as having a moderate ($n = 15$), low ($n = 3$) or very-low ($n = 7$) degree of confidence.

Barriers and facilitators to seeking and accessing appropriate support

The first theme focuses on CYP's barriers and facilitators to seeking and accessing appropriate support for their mental health crisis. Children and young people say that they would like easier and more immediate access to mental health services and professionals (CERQual-Moderate). However, numerous barriers are described in the available literature, first that various thresholds of eligibility exist making access to specialist services difficult (CERQual-Moderate). Second, many CYP, their friends and relatives state that they do not know where to turn when they are experiencing mental health crises (CERQual-Moderate). Furthermore, various external factors exist that influence access to mental health support, such as finance and transport, and some CYP feel that these affect their ability to access crisis services (CERQual-Moderate). Transitions across mental health care providers with clear pathways between different services are seen as helpful, but insufficient communication and collaboration are often described, with many CYP slipping through the gaps (CERQual-Low). Support from others can facilitate seeking and accessing help during crisis. Where CYP have support from significant people in their lives, they are aided to access crisis services (CERQual-Moderate). However, while some CYP would like someone to speak to, others find it too difficult to talk at the time of crisis (CERQual-Moderate).

What children and young people want from crisis services

What CYP want from crisis services was the second overarching theme. Some CYP feel that peer support and incorporating those with lived experience of mental health crisis within services are crucial (CERQual-Moderate). Moreover, some CYP feel that services should cater specifically for them and be targeted at specific age groups (CERQual-Moderate). Other CYP specified the attributes that health professionals who they see during crisis should have including good listening skills, being understanding, sensitive, compassionate, skilled and knowledgeable in mental health issues (CERQual-Very-low). CYP also identified the need for different forms of support and pathways to services which include telephone, text and email communication (CERQual-High). While access to telephone crisis support is preferred via a direct line staffed by trained counsellors with out-of-hours availability (CERQual-High), parents report that telephone counselling services are not always seen as providing timely or appropriate advice (CERQual-Moderate).

Regarding texting, CYP state that it provides immediate support and anonymity, and they like having the ability to store and refer back to the messages at a later date (CERQual-Moderate).

Children's, and young people's and families' experiences of crisis services

The third theme explored CYP's and their families' experiences of crisis services. Children and young people express that there is a general lack of support before crisis is reached (CERQual-Moderate), which is backed by stakeholders who acknowledge that CYP often have difficulties accessing support for mental health problems from specialist CAMHS and/or primary care before a crisis (CERQual-Very-low). Long wait times for specialist services and insufficient information result in the ED being the default option when CYP are in mental health crisis (CERQual-Very-low). However, their families and stakeholders reported numerous concerns regarding the assessment, management and level of follow-up care of those CYP who present in crisis to an ED (CERQual-Moderate). Furthermore, some CYP find the noisy and busy environment of ED unhelpful with a lack of privacy and poor staff attitudes aggravating this unsuitability (CERQual-Moderate). The processes leading to admission when CYP are in crisis are described as lengthy, over-complicated and frustrating, and regarding inpatient care, CYP has mixed views (CERQual-Moderate). There are also mixed views from CYP about CAMHS and crisis services (CERQual-Moderate). Additionally, CYP believed that crisis plans lack sufficient detail (CERQual-Very-low).

The challenges of service provision

The main focus of the fourth theme was the challenges of service provision. Service providers feel that sometimes adaptations could be made where inappropriate admission of CYP to adult or paediatric wards occurs (CERQual-Very-low). In the United Kingdom, stakeholders and service providers have numerous concerns regarding inadequate crisis care outside of traditional office hours, but when available, this is considered as helpful (CERQual-Low). Furthermore, geographical boundary issues, variable service provision across different UK locations and differences in age entry requirements are concerns expressed by stakeholders and service providers (CERQual-Very-low). Stakeholders feel that the need for crisis beds could decrease if adequate community resources such as assertive outreach and early intervention services are ensured, although ED admission is required for CYP to have CAMHS assessments (CERQual-Very-low). Police involvement can occur during CYP's mental health crisis, and while some families state that they do not like involving police, others report that it helps to de-escalate situations (CERQual-Low). Service providers have raised concerns about police cells as places of safety, regarding them as inappropriate facilities and feel that alternatives are needed (ungraded not primary research).

Objective 3: Effectiveness of intervention approaches or models of mental health crisis support

The effectiveness of intervention approaches or current models of mental health crisis support for CYP was the

focus of the third objective. The full data extraction is available in Appendix S8. The GRADE approach (see Appendix S9) was applied to the evidence, and the observational studies were all downgraded from low to very-low, and the RCTs were downgraded from high to moderate.

Crisis services/interventions initiated within the emergency department

Six studies across seven reports (Asarnow et al., 2011; Dion et al., 2010; RCEM, 2018; Rotheram-Borus et al., 1996, Rotheram-Borus et al., 2000; Wharff et al., 2012, 2019) explored the effectiveness of crisis services/interventions initiated within the ED. These services were found to be effective in reducing depression (GRADE:very-low to moderate) and improving family functioning (GRADE:moderate) or family empowerment (GRADE:very-low) between recruitment and follow-up periods. Children and young people receiving such services were more likely to be referred to intensive outpatient care (GRADE:moderate), to attend or complete outpatient treatment and were less likely to be hospitalised (GRADE:very-low). Greater satisfaction with services compared with those in a control group was also reported (GRADE:moderate).

No significant differences were reported for behaviour (GRADE:moderate), family adaptability, family cohesion, impulsivity, self-esteem, likelihood of repeat ED visit post-discharge (GRADE:very-low), number of completed suicide or suicide attempts between recruitment and follow-up periods (GRADE:very-low to moderate). Mixed findings were reported for the number of outpatient visits attended (GRADE:moderate) and levels of suicidality (GRADE:very-low to moderate). Health care staff reported dissatisfaction around the lack of out-of-hours availability.

Home or community-based programmes

Effectiveness of home or community-based programmes was the focus of three studies across seven reports (Evans et al., 2003; Henggeler et al., 1999, 2003; Huey et al., 2004; Muskens et al., 2019; Schoenwald, Ward, Henggeler, & Rowland, 2000; Sheidow et al., 2004). The findings showed that home or community-based programmes were effective in reducing depression (GRADE:moderate), psychiatric symptoms (GRADE:moderate), improving self-concept (GRADE:moderate), family adaptability (GRADE:moderate) or family cohesion (parents' perspective) (GRADE:moderate) and reducing number of completed suicide and suicide attempts (GRADE:moderate) between recruitment and follow-up periods and were cost-effective. Mixed findings were reported for behaviour with one out of two studies reporting that the intervention was effective in reducing levels of internalising and externalising behaviour (GRADE:moderate). Children and young people receiving these services were more likely to remain in the community post-treatment (GRADE:moderate), less likely to be hospitalised (GRADE:moderate) and report greater satisfaction with services compared with those in a control group (GRADE:moderate). No differences were reported for psychosocial functioning (GRADE:moderate), self-esteem (GRADE:moderate) and family cohesion (CYP perspective) (GRADE:moderate) between recruitment and follow-up periods.

Inpatient care

Two studies (Greenham & Bisnaire, 2008; Rogers et al., 2015) explored the effectiveness of specific inpatient programmes for crisis care in CYP. This evidence synthesis found that specific inpatient programmes were effective in reducing psychiatric symptoms (GRADE:moderate) and suicidality (GRADE:moderate) and improving psychosocial functioning (GRADE:moderate) between recruitment periods and follow-up. These inpatient programmes can also decrease length of stay (LoS) (GRADE:moderate) and subsequently costs (GRADE:moderate). No differences were reported in the rate of ED visits for up to 1 year post discharge (GRADE:moderate).

Outpatient mental health programmes

The effectiveness of outpatient mental health programmes was explored in three studies across four reports (Greenfield, Larson, Hechtman, Rousseau, & Platt, 2002; Latimer, Garipey, & Greenfield, 2014; Lee & Korczak, 2010; Maslow et al., 2017). This evidence synthesis found that CYP attending outpatient mental health programmes were less likely to be hospitalised compared with those in a control group (GRADE:very-low) and experience quicker access to additional resources (GRADE:very-low). An association also exists between parental satisfaction and increased adherence to outpatient treatment (GRADE:very-low). No differences were reported for psychosocial functioning (GRADE:very-low), in the rate of ED visits for up to 1 year post discharge (GRADE:very-low), LoS in the ED before discharge to a rapid outpatient service (GRADE:very-low), number of suicide attempts (GRADE:very-low), suicidality (GRADE:very-low) or post discharge use of resources (GRADE:very-low).

Mobile crisis services

Two studies investigated the effectiveness of mobile crisis services (Fendrich et al., 2019; Martin, 2005). CYP receiving mobile crisis services were less likely to attend ED post-discharge compared with those in a control group (GRADE:very-low), but there was no difference in hospitalisation rates (GRADE:very-low).

Telepsychiatry

The effectiveness of telepsychiatry initiatives was reported across two studies (Roberts, Hu, Axas, & Repetti, 2017; Thomas et al., 2018). Telepsychiatry initiatives were effective in decreasing LoS (GRADE:very-low) and costs (GRADE:very-low). Parents reported high levels of satisfaction (GRADE:very-low) and levels of staff satisfaction were improved (GRADE:very-low). No differences were reported in the rate of repeat visits to ED (GRADE:very-low) or in referral pathways after the introduction of telepsychiatry (GRADE:very-low). Mixed findings were reported for the rate of hospitalisation with one out of two studies reporting that telepsychiatry is effective at reducing the likelihood that a person will be hospitalised (GRADE:very-low).

Implementation of a dedicated mental health team in the emergency department

Two studies explored the implementation of a dedicated mental health team in the ED (Holder, Rogers, Peterson, Shoenleben, & Blackhurst, 2017; Uspal, Rutman,

Kodish, Moore, & Migita, 2016). When a dedicated mental health team is implemented in the ED, CYP were less likely to be hospitalised (GRADE:very-low) and more likely to return to a home environment (GRADE:very-low). Length of stay was also decreased (GRADE:very-low). No differences were reported in the 72-hr return rate to the ED (GRADE:very-low) or in the costs of implementing the service (GRADE:very-low).

Assessment approaches within the emergency department

Carrying out assessment approaches within the ED was investigated across three studies (Lee et al., 2019; Mahajan et al., 2007; Nagarsekar et al., 2021) and was found to be successful at triggering recommendations for further community services, but there were no differences in the 30-day return rate to the ED (GRADE:very-low). Mixed findings were reported for LoS with one out of three studies reporting a reduction (GRADE:very-low). Cost savings were reported (GRADE-very-low). There were also no differences in client satisfaction with the newly implemented Kids Assessment Liaison for Mental Health (KALM) pathway (Nagarsekar et al., 2021) compared with the care as usual pathway (GRADE:very-low).

Crisis programmes within residential treatment centres. Only one study across two reports (Baker, Archer, & Melnick, 2004; Baker & Dale, 2002) focused on crisis programmes within residential treatment centres and found that they were effective in reducing LoS and subsequently costs at the time of the crisis (GRADE: not applicable).

Assessment approaches within educational settings

Assessment approaches within educational settings were reported across four studies (Capps et al., 2019; Michael et al., 2015; Sale et al., 2014; Walter et al., 2019). No completed suicides or suicide attempts were reported within educational settings when assessment approaches were introduced (GRADE: not applicable). A variety of referral destinations were noted, and in some cases referrals to more acute levels of care were avoided. Moreover, levels of staff satisfaction were high (GRADE: not applicable).

Objective 4: Goals of crisis interventions

Thematic summaries that drew evidence with regard to the goals of crisis services from primary research ($n = 48$), descriptive accounts of the organisation of crisis services ($n = 36$) and UK-only grey literature documents ($n = 54$) were conducted. The full-data extraction and thematic summaries can be found in Appendix S10. Five services in which crisis care for CYP was provided did not present any details of their goals (Bolger et al., 2004; Idenfors et al., 2015; Liegghio & Jaswal, 2015; Nirui & Chenoweth, 1999; Walter et al., 2006). Seven distinct goals of crisis services were described across the included literature.

To keep CYP in their home environment as an alternative to admission

Keeping CYP in their own homes and avoiding admission to psychiatric hospital were a feature of 12 crisis response services.

To assess need and to plan

The goals of assessing the needs of CYP and their families and/or planning interventions were either explicitly identified or inferred as necessary precursors to providing care and treatment, across 45 crisis response services.

To improve CYP and/or their families' engagement with community treatment

To improve the engagement of CYP and/or their families in community treatment was cited as a being a specific goal in 10 crisis response services.

To link CYP and/or their families to additional mental health services as necessary

Forty services have one of the stated goals in 45 crisis response services to connect children, young people and families to ongoing mental health support.

To provide peer support

Two crisis response services (a telephone service and an internet-based service) have the goal of providing peer support to CYP in crisis situations.

To stabilise and manage the present crisis over the immediate period

Using combinations of emergency department based interventions, hospital care or care on an outpatient or community basis, a stated goal across 35 crisis response services is to stabilise and manage the young person's crisis in the immediate period.

To train and/or supervise staff

Ten crisis response services additionally had a goal of training and supervising staff. This either involved training staff in the use of triage and/ or risk assessment tools or education and/or supervising the delivery of specific approaches to crisis care.

Discussion

This systematic review looked at the organisation of crisis services within hospital and community settings, the experiences and perceptions of mental health crisis support, the effectiveness of current models of crisis support and the goals of crisis intervention. We have shown that there is a wide variety of different interventions and models of crisis care, as well as digitally mediated support and triage/assessment approaches. The age range for this systematic review sought to retrieve evidence for CYP up to 18 years and explore evidence for youth aged 18–25 years. There were, however, only three studies that included young people over the age of 16 years so the evidence that informs this work is predominantly from children and early adolescents.

Regarding the experiences and perceptions of mental health crisis support, four themes consisting of 27 synthesis summary statements using the CERQual approach were identified. A high degree of confidence exists in the synthesised evidence regarding the need for telephone, text and email crisis services and telephone access via direct line with round-the-clock support from trained staff. A recent review reported that helplines may benefit CYP who seek assistance with a wide range of

issues, including depression, family problems, abuse or suicidality (Mathieu et al., 2021). Further review evidence suggests that CYP find that helplines, online and text-based services are both usable and engaging for a variety of mental health-based concerns, providing easily accessible timely support with anonymity and privacy, inclusivity and control over their mental health issue management (Pretorius, Chambers, & Coyle, 2019; Ridout & Campbell, 2018). A recommendation for the development of crisis services is the inclusion of text, telephone helplines and email as a component of an extended hours service/24-hr service model. However, it must be considered that health literacy, fears about privacy and confidentiality and uncertainty about the legitimacy of online resources can be a potential barrier to using text, telephone or online mental health services, and these issues need to be addressed when developing such interventions (Pretorius et al., 2019). Although CYP indicate that they would benefit from telephone, text or online services, there is limited research into the clinical effectiveness of some modalities, such as text-based services (Mathieu et al., 2021; Wilkins, Kelly-Dean, & O’Kail, 2019), and lack of funding could be a potential issue into developing and studying these interventions (Wilkins et al., 2019).

It is widely reported that CYP who need support for their mental health do not always access services (Anderson, Howarth, Vainre, Jones, & Humphrey, 2017; Lewis, 2021; Westberg, Nyholm, Nygren, & Svedberg, 2022). Previous reviews exploring CYP’s experiences of help-seeking for mental health problems showed that support structures are often seen as inaccessible and unresponsive (Anderson et al., 2017; Westberg et al., 2022). Our systematic review identified numerous moderate confidence synthesis statements related to CYP’s barriers and facilitators to seeking and accessing appropriate support at the point of crisis. Of note is that CYP and their families are often unaware of access routes to crisis care. This concurs with the findings from a recent scoping review in reporting that one of the major barriers for help-seeking is a lack of awareness of mental health services along with a poor understanding of pathways to access appropriate care (Anderson et al., 2017). Therefore, a recommendation that arises from this work is that services should be more visible through better signposting to other agencies. This information could be co-produced with CYP to use family friendly language on how to locate appropriate services.

Additionally, we found that access to crisis services could be made easier by addressing CYP’s and their families’ financial or transport problems. This echoes the findings of previous work, as having to travel significant distances to see mental health specialists is commonly cited by CYP and their families as being problematic (Anderson et al., 2017). Another area in which there was moderate confidence was around the thresholds of eligibility making access to specialist services difficult. It is commonly reported that referrals to CAMHS are often rejected due to not meeting the eligibility criteria or age specification of services (Crenna-Jennings & Hutchinson, 2020; O’Shea, 2020). There is an urgent need to tackle such issues so that mental health problems that could potentially be dealt with do not escalate to the point of crisis.

The role of peer support and its potential to develop resilience and reduce mental health needs are well established (Coleman, Sykes, & Groom, 2017; Theodosiou & Glick, 2020). A moderate degree of confidence was found in the synthesised evidence relating to CYP’s need for peer support and contact with those who have lived experience of mental health crisis to be included within services. The participation of CYP and their families in the planning and development of mental health systems is recognised as important (RCGP et al., 2017), and in the United Kingdom, the ‘Amplified programme’ is an example of good practice in this area (Young Minds, 2022). Additionally, the synthesised evidence suggests that CYP feel that services should cater specifically for them and be targeted at specific age groups. Thus, it might be helpful to involve representatives from a panel of CYP to advise on aspects of service design and to address age appropriateness of facilities in the commissioning of new and development of existing mental health crisis services.

This evidence synthesis has identified with a moderate degree of confidence that due to long wait times for specialist services, the support provided by EDs is crucial to mental health crisis care for CYP. There has been an international trend towards an increase in ED presentations by CYP for mental health reasons over recent years (Hoge, Vanderploeg, Paris, Lang, & Olezeski, 2022; Morgan et al., 2017; RCEM, 2019; Sara et al., 2022). Evidence suggests that crisis care and assessment initiated within the ED can lead to a number of positive outcomes for CYP. To support this, services need to be developmentally appropriate, healthcare professionals working in EDs need a level of expertise with CYP in mental health crisis, and the environment needs to be calm and offer privacy. Additionally, EDs need links to outpatient care, where there are transparent eligibility criteria for CYP in crisis and 24-hr availability. Admission processes could also be streamlined. However, it must be considered that the quality of evidence from intervention studies was low. Therefore, caution is recommended before applying the above for ED service development.

With increasing mental health presentations in emergency settings, services should consider mental health management pathways before and after crisis as there is evidence with a moderate degree of confidence that there is a general lack of support pre crisis. Colizzi, Lasalvia, and Ruggeri (2020) suggest that integrated and multidisciplinary approaches are required to improve promotion of preventive interventions that address mental health for CYP (Colizzi et al., 2020). In the United Kingdom, the importance of early intervention is frequently emphasised but little has been achieved (Grant, Laing, & Long, 2022) and the Health and Social Care Committee Inquiry into Children and Young People’s Mental Health calls for urgent action (Grant et al., 2022). Furthermore, concerns regarding the assessment, management and level of follow-up care for CYP who present in crisis to an ED have been raised. Mental health support networks could be strengthened to increase the likelihood of CYP accessing early and appropriate support within their community, thus preventing episodes of crisis. Accessible community-based early mental health interventions with shorter waiting times are therefore important. Typical community resources that might be helpful include drop in emotional support services in youth centres,

access to counselling or emotional support in schools and colleges and mental health community care and treatment provided by specialist health and social care services or third sector.

Although there was a plethora of evidence reporting on the effectiveness of approaches or models of crisis support, these were found to be based on moderate to very-low-quality evidence. A significant number of studies were located within EDs, and this poses a dilemma as traditionally EDs are not designed to manage mental health crises for any age. In the United Kingdom, as a general principle, it is not advocated that EDs become the key service to support CYP in mental health crisis. However, the international evidence in this review showed that such approaches are effective and acceptable for CYP experiencing crisis. Thus, where CYP access EDs due to limited services elsewhere, there are evidence-based practices and processes elicited from this review that could be embraced. However, the challenge is to develop services that are available prior to a crisis or in an accessible and available location that provides a service outside of office hours, with appropriately skilled professionals to reduce the use of EDs for this purpose. This systematic review also showed that school, community and home-based crisis programmes may also lead to positive outcomes for CYP. However, a variety of crisis support should be available so that CYP can choose a format that is best for them (e.g. telephone, email, text and in person face-to-face).

In this evidence synthesis, we have pulled out what goals of a crisis service should be from both policy and empirical evidence. In brief, these are to keep CYP in their home environment, to facilitate the assessment of the child or young person's needs, offering a stabilisation of the crisis, improve CYP and their family's engagement with community treatment and to link them to ongoing mental health services as necessary, through, peer support where possible. Some crisis services include training and/or supervision of others as part of their function. Although, the majority of the evidence was generated outside of the United Kingdom, the goals nevertheless have resonance with practice in the United Kingdom. In that a common driver for crisis services is of stabilising the immediate crisis and identifying ongoing mental health support being.

Implications for future research

As the available literature is US healthcare system focused, there is a need for new high-quality studies to investigate the organisation, delivery and effectiveness of existing services that provide crisis responses to CYP across other countries including the United Kingdom. Out-of-hours support for CYP was highlighted as particularly important, future research should explore the precise types of support that would be most useful and the form they should take. Further research should identify effective community support that could be instigated to prevent CYP from reaching a mental health crisis. Several different types of crisis intervention models were shown to be associated with positive outcomes for CYP, research needs to identify which ones are more effective and for what subgroups of CYP, including an exploration of the distinct needs of subgroups of CYP when in crisis. Involving CYP in the co-design of research

priorities in this field is important as good-quality research about acceptability of services from the viewpoint of CYP and their families was lacking and needs further investigation.

Limitations

Contrary to our initial expectations, we found relatively few high-quality international studies investigating social, educational and health innovations directed at helping CYP in crisis. A wide range of crisis provision was reported across many different settings which made comparison of these models difficult, and there were very limited number of studies conducted in a community/home-based setting. Most of the studies included in this evidence synthesis were conducted in the USA. Comparisons between the healthcare provision in the USA and other countries are difficult because of the different way healthcare is both commissioned and delivered around the world, thus challenging the transferability of findings to other health systems. However, there are principles about practice that can be adapted and used to inform service development. There was also a lack of studies that described how different mental health services were integrated, so this was not commented upon. In terms of methods, the heterogeneity of interventions which meant that meta-analysis was not possible is a further potential limitation.

Conclusions

This was a timely review of the available literature on mental health crisis services for CYP aged 5–25 years. This review examined literature published before the pandemic and highlighted the evidence of effectiveness and acceptability for some approaches of mental health crisis. Although during the pandemic and since, demand for such services has significantly increased, the insights gained from conducting this review can inform ongoing and pressing service development for this much needed area of care. Much of the literature contained in this review was based in the USA, and this was particularly around the use of EDs, but there is value in considering the lessons learned from the international literature and applying them to the desired context.

Acknowledgements

This project was funded by the NIHR Health Services and Delivery Research Programme (project number NIHR128359) and will be published in full in the NIHR journal library. This publication presents independent research commissioned by the National Institute for Health and Care Research (NIHR). The views and opinions expressed by authors in this publication are those of the authors and do not necessarily reflect those of the NHS, the NIHR or the Department of Health. The authors are also grateful to all members of the stakeholder advisory group and particularly to the group's independent chair Professor Michael Coffey for their time, energy and expertise. The authors have declared that they have no competing or potential conflicts of interest.

Author contributions

D.E., N.E., J.C.A., B.H and R.L. contributed to the development of the protocol, screened, selected, appraised and synthesised reports and wrote for and edited the

final publication. J.C.S. wrote for and edited the final publication. M.E. contributed to the development of the protocol, screened reports and wrote for and commented on the final publication. E.G. contributed to the development of the protocol and searched for reports and wrote for and edited the final publication. E.W. contributed to the development of the protocol, screened reports and wrote for and commented on the final publication.

Ethical information

No ethical approval was required, as the study reported here was a synthesis of existing evidence and required no additional collection of data.

Correspondence

Deborah Edwards, School of Healthcare Sciences, College of Biomedical and Life Sciences, Cardiff University, Eastgate House, 35-43 Newport Road, Cardiff CF24 0AB, UK; Email: edwardsdj@cardiff.ac.uk

Supporting information

Additional Supporting Information may be found in the online version of this article:

- Appendix S1.** Final search strategies.
- Appendix S2.** Supplementary searches.
- Appendix S3.** Quality appraisal scores.
- Appendix S4.** Table of studies excluded from the review.
- Appendix S5.** Characteristics of included studies.
- Appendix S6.** Organisation of crisis services.
- Appendix S7.** CERQual summary of findings table.
- Appendix S8.** Data extraction of quantitative effectiveness data.
- Appendix S9.** GRADE summary of findings.
- Appendix S10.** Thematic synthesis of goals of crisis interventions.

References

- Anderson, J., Howarth, E., Vainre, M., Jones, P., & Humphrey, A. (2017). A scoping literature review of service-level barriers for access and engagement with mental health services for children and young people. *Children and Youth Services Review*, 77, 164–176.
- Asarnow, J.R., Baraff, L.J., Berk, M., Grob, C.S., Devich-Navarro, M., Suddath, R., ... & Tang, L. (2011). An emergency department intervention for linking pediatric suicidal patients to follow-up mental health treatment. *Psychiatric Services*, 62, 1303–1309.
- ASCL & NCB. (2016). *Keeping young people in mind: Findings from a survey of schools across England*. Leicester, UK: Association of School and College Leaders and National Children's Bureau.
- Baker, A., Archer, M., & Melnick, D. (2004). An alternative to hospitalizing youth in psychiatric crises: The children's village crisis residence model. *Residential Treatment for Children & Youth*, 22, 55–74.
- Baker, A., & Dale, N. (2002). Psychiatric crises in child welfare residential treatment. *Children's Services: Social Policy, Research, & Practice*, 5, 213–229.
- Bolger, S., O'Connor, P., Malone, K., & Fitzpatrick, C. (2004). Adolescents with suicidal behaviour: Attendance at A&E and six month follow-up. *Irish Journal of Psychological Medicine*, 21, 78–84.
- Canadian Institute for Health Information. (2022). *Children and youth mental health in Canada [infographic]*. Available from: <https://www.cihi.ca/en/children-and-youth-mental-health-in-canada>. [last accessed 06 February 2023].
- Capps, R., Michael, K., & Jameson, J. (2019). Lethal means and adolescent suicidal risk: An expansion of the peace protocol. *Journal of Rural Mental Health*, 43, 3–16.
- CASP. (2018). *CASP checklists [Online]*. Available from: <https://casp-uk.net/#!checklists/cb36>. [last accessed 06 February 2023].
- Coleman, N., Sykes, W., & Groom, C. (2017). *Peer support and children and young people's mental health. Research review*. Department of Education. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/603107/Children_and_young_people_s_mental_health_peer_support.pdf. [last accessed 06 February 2023].
- Colizzi, M., Lasalvia, A., & Ruggeri, M. (2020). Prevention and early intervention in youth mental health: Is it time for a multidisciplinary and trans-diagnostic model for care? *International Journal of Mental Health Systems*, 14, 23.
- CQC. (2018). *Are we listening? Review of children and young people's mental health services*. Care Quality Commission. Available from: https://www.cqc.org.uk/sites/default/files/20180308b_arewelisting_report.pdf. [last accessed 06 February 2023].
- CQC. (2019). *Brief guide: Waiting times for community child and adolescent mental health services*. Care Quality Commission. Available from: https://www.cqc.org.uk/sites/default/files/Brief_guide_Waiting_times_for_community_child_and_adolescent_mental_health_services.pdf. [last accessed 06 February 2023].
- CRD. (2009). *CRD's guidance on undertaking reviews in health care*. York, UK: Centre for Reviews and Dissemination, University of York.
- Crenna-Jennings, W., & Hutchinson, J. (2020). *Access to child and adolescent mental health services in 2019*. Education Policy Institute. Available from: https://epi.org.uk/wp-content/uploads/2020/01/Access-to-CAMHS-in-2019_EPI.pdf. [last accessed 06 February 2023].
- Dion, J., Kennedy, A., Cloutier, P., & Gray, C. (2010). Evaluating crisis intervention services for youth within an emergency department: A view from within. *Child Care in Practice*, 16, 241–256.
- Evans, M., Boothroyd, R., Armstrong, M., Greenbaum, P., Brown, E., & Kuppinger, A. (2003). An experimental study of the effectiveness of intensive in-home crisis services for children and their families: Program outcomes. *Journal of Emotional and Behavioral Disorders*, 11, 93–104.
- Fendrich, M., Ives, M., Kurz, B., Becker, J., Vanderploeg, J., Bory, C., ... & Plant, R. (2019). Impact of mobile crisis services on emergency department use among youths with behavioral health service needs. *Psychiatric Services*, 70, 881–887.
- Garcia, I., Vasiliou, C., & Penketh, K. (2007). *Listen up! Person-centred approaches to help young people experiencing mental health and emotional problems*. London, UK: Mental Health Foundation.
- Gough, D., Oliver, S., & Thomas, J. (2017). *An introduction to systematic reviews* (2nd ed.). Sage: Sage Publishing.
- Grant, K., Laing, J., & Long, R. (2022). *Support for children and young people's mental health*. House of Commons. Available from: <https://commonslibrary.parliament.uk/research-briefings/cbp-7196/>. [last accessed 06 February 2023].
- Greenfield, B., Hechtman, L., & Tremblay, C. (1995). Short-term efficacy of interventions by a youth crisis team. *Canadian Journal of Psychiatry*, 40, 320–324.
- Greenfield, B., Larson, C., Hechtman, L., Rousseau, C., & Platt, R. (2002). A rapid-response outpatient model for reducing hospitalization rates among suicidal adolescents. *Psychiatric Services*, 53, 1574–1579.
- Greenham, S., & Bisnaire, L. (2008). An outcome evaluation of an inpatient crisis stabilization and assessment program for youth. *Residential Treatment for Children & Youth*, 25, 123–143.
- Guyatt, G., Oxman, A., Vist, G., Kunz, R., Fiack-Ytter, Y., Alosno-Coello, P., ... GRADE Working Group. (2008). GRADE: An emerging consensus on rating quality of evidence and strength of recommendations. *BMJ*, 336, 924–926.

- Hamm, M., Osmond, A., Curran, J., Scott, S., Ali, S., Hartling, L., ... & Newton, A.S. (2010). A systematic review of crisis interventions used in the emergency department: Recommendations for pediatric care and research. *Pediatric Emergency Care*, 26, 952–962.
- Haxell, A. (2015). On becoming textually active at Youthline, New Zealand. *British Journal of Guidance & Counselling*, 43, 144–155.
- Hazell, P. (2003). Establishment and evaluation of a clinical pathway for young suicide attempters and ideators. *Australian Psychiatry*, 11, 54–58.
- Henggeler, S., Rowland, M., Halliday-Boykins, C., Sheidow, A., Ward, D., Randall, J., ... & Edwards, J. (2003). One-year follow-up of multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis. *Journal of the American Academy of Child & Adolescent Psychiatry*, 42, 543–551.
- Henggeler, S., Rowland, M., Randall, J., Ward, D., Pickrel, S.G., Cunningham, P., ... & Santos, A.B. (1999). Home-based multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis: Clinical outcomes. *Journal of the American Academy of Child & Adolescent Psychiatry*, 38, 1331–1339.
- HM Government. (2014). *Mental health crisis care concordat. Improving outcomes for people experiencing mental health crisis*. HM Government. Available from: https://www.crisiscareconcordat.org.uk/wp-content/uploads/2014/04/36353_Mental_Health_Crisis_accessible.pdf. [last accessed 06 February 2023].
- Hoge, M., Vanderploeg, J., Paris, M., Lang, J., & Olezeski, C. (2022). Emergency department use by children and youth with mental health conditions: A health equity agenda. *Community Mental Health Journal*, 2002 (online first), 58, 1225–1239.
- Holder, S., Rogers, K., Peterson, E., Shoeneleben, R., & Blackhurst, D. (2017). The impact of mental health services in a pediatric emergency department: The implications of having trained psychiatric professionals. *Pediatric Emergency Care*, 33, 311–314.
- House of Commons Health and Social Care Committee. (2021). *Children and young people's mental health. Eight Report of Session 2021–2022*. House of Commons. Available from: <https://committees.parliament.uk/publications/8153/documents/83622/default/>. [last accessed 06 February 2023].
- Huey, S., Henggeler, S., Rowland, M., Halliday-Boykins, C., Cunningham, P., Pickrel, S., & Edwards, J. (2004). Multisystemic therapy effects on attempted suicide by youths presenting psychiatric emergencies. *Journal of the American Academy of Child & Adolescent Psychiatry*, 43, 183–190.
- Idenfors, H., Kullgren, G., & Salander, R. (2015). Professional care as an option prior to self-harm: A qualitative study exploring young people's experiences. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 36, 179–186.
- Janssens, A., Hayen, S., Walraven, V., Leys, M., & Deboutte, D. (2013). Emergency psychiatric care for children and adolescents: A literature review. *Pediatric Emergency Care*, 29, 1041–1050.
- Lamb, C. (2009). Alternatives to admission for children and adolescents. Providing intensive mental healthcare services at home and in communities: What works? *Current Opinion in Psychiatry*, 22, 345–350.
- Latimer, E., Garipey, G., & Greenfield, B. (2014). Cost-effectiveness of a rapid response team intervention for suicidal youth presenting at an emergency department. *The Canadian Journal of Psychiatry*, 59, 310–318.
- Lee, A., Deevska, M., Stillwell, K., Black, T., Meckler, G., Park, D., ... & Doan, Q. (2019). A psychosocial assessment and management tool for children and youth in crisis. *CJEM*, 21, 87–96.
- Lee, J., & Korczak, D. (2010). Emergency physician referrals to the pediatric crisis clinic: Reasons for referral, diagnosis and disposition. *Journal of the Canadian Academy of Child and Adolescent Psychiatry*, 19, 297–302.
- Leeb, R.T., Bitsko, R.H., Radhakrishnan, L., Martinez, P., Njai, R., & Holland, K.M. (2020). Mental health-related emergency department visits among children aged <18 years during the COVID-19 pandemic — United States, January 1–October 17, 2020. *MMWR Morbidity and Mortality Weekly Report*, 69, 1675–1680.
- Lewin, S., Glenton, C., Munthe-Kaas, H., Carlsen, B., Colvin, C., Gülmezoglu, M., ... & Rashidian, A. (2015). Using qualitative evidence in decision making for health and social interventions: An approach to assess confidence in findings from qualitative evidence syntheses (GRADE-CERQual). *PLoS Medicine*, 12, e1001895.
- Lewis, P. (2021). *Reaching the tipping point. Children and young people's mental health*. Mental Health Network NHS Confederation. Available from: <https://www.nhsconfed.org/publications/reaching-tipping-point>. [last accessed 06 February 2023].
- LGA. (2022). *Children and young people's emotional wellbeing and mental health – Facts and figures*. Local Government Association. Available from: <https://www.local.gov.uk/about/campaigns/bright-futures/bright-futures-camhs/child-and-adolescent-mental-health-and>. [last accessed 06 February 2023].
- Lieghio, M., & Jaswal, P. (2015). Police encounters in child and youth mental health: Could stigma informed crisis intervention training (CIT) for parents help? *Journal of Social Work Practice*, 29, 301–319.
- Mahajan, P., Thomas, R., Rosenberg, D., Leleszi, J.P., Leleszi, E., Mathur, A., ... & Knazik, S.R. (2007). Evaluation of a child guidance model for visits for mental disorders to an inner-city pediatric emergency department. *Pediatric Emergency Care*, 23, 212–217.
- Martin, W. (2005). *An efficacy study of a youth mobile crisis intervention program [Health & Mental Health Treatment & Prevention 3300]*. Cincinnati, Ohio: Union Institute and University.
- Maslow, G., Banny, A., Pollock, M., Stefureac, K., Rosa, K., Walter, B., ... & Heilbron, N. (2017). Preliminary outcomes from an integrated pediatric mental health outpatient clinic. *Child and Adolescent Psychiatric Clinics of North America*, 26, 761–770.
- Mathieu, S., Uddin, R., Brady, M., Batchelor, S., Ross, V., Spence, S., ... & Kölves, K. (2021). Systematic review: The state of research into youth helplines. *Journal of the American Academy of Child and Adolescent Psychiatry*, 60, 1190–1233.
- MHT. (2016). *The five year forward view for mental health*. Mental Health Taskforce. Available from: <https://www.england.nhs.uk/wp-content/uploads/2016/02/Mental-Health-Taskforce-FYFV-final.pdf>. [last accessed 06 February 2023].
- Michael, K., Jameson, J., Sale, R., Orlando, C., Schorr, M., Brazille, M., ... & Massey, C. (2015). A revision and extension of the prevention of escalating adolescent crisis events (PEACE) protocol. *Children and Youth Services Review*, 59, 57–62.
- Morgan, C., Webb, R., Carr, M., Kontopantelis, E., Green, J., & Chew-Graham, C. (2017). Incidence, clinical management, and mortality risk following self-harm among children and adolescents: Cohort study in primary care. *BMJ*, 359, j4351.
- Murphy, S.M., Irving, C.B., Adams, C.E., & Waqar, M. (2015). Crisis intervention for people with severe mental illnesses. *Cochrane Database Syst Rev*, 12, CD001087.
- Muskens, J.B., Hoppers, P., Hilderink, C., van Deurzen, P.A., Buitelaar, J., & Staal, W. (2019). Intensive home treatment for adolescents in psychiatric crisis. *BMC Psychiatry*, 19, 412.
- Nagarsekar, B., Townsend, J., Ohr, S.O., & Clapham, M. (2021). Innovative pathway for managing children and adolescents with mental health concerns in the emergency department: An intervention feasibility study. *Emergency Medicine Australasia*, 33, 279–285.
- Narendorf, S., Munson, M.R., Washburn, M., Fedoravicius, N., Wagner, R., & Flores, S.K. (2017). Symptoms, circumstances, and service systems: Pathways to psychiatric crisis service use among uninsured young adults. *American Journal of Orthopsychiatry*, 87, 585–596.

- National Assembly for Wales Children Young People and Education Committee. (2018). *Mind over matter: A report on the step change needed in emotional and mental health support for children and young people in Wales*. Cardiff, UK: National Assembly for Wales.
- NHS Digital. (2020). *Mental Health of Children and Young People in England, 2020: Wave 1 follow up to the 2017 survey*. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-of-children-and-young-people-in-england/2020-wave-1-follow-up>. [last accessed 06 February 2023].
- NHS England. (2019). *NHS mental health implementation plan 2019/20–2023/24*. NHS England. Available from: <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/07/nhs-mental-health-implementation-plan-2019-20-2023-24.pdf>. [last accessed 06 February 2023].
- NHS England, & DoH. (2018). *Future in mind. Promoting, protecting and improving our children and young people's mental health and wellbeing*. Department of Health. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/414024/Childrens_Mental_Health.pdf. [last accessed 06 February 2023].
- Nirui, M., & Chenoweth, L. (1999). The response of healthcare services to people at risk of suicide: A qualitative study. *Australian and New Zealand Journal of Psychiatry*, 33, 361–371.
- O'Shea, N. (2020). *Forecasting needs and risks in the UK*. Centre for Mental Health. Covid-19 and the Nation's Mental Health. Available from: <https://www.centreformentalhealth.org.uk/publications/covid-19-and-nations-mental-health-october-2020>. [last accessed 06 February 2023].
- Page, M., McKenzie, J., Bosstuyt, P., Boultron, I., Hoffman, T., Mulrow, C., ... & Mohe, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71.
- Pona, I., & Turner, A. (2018). *Crumbing futures: Why vulnerable 16 and 17 year olds need more support as they move into adulthood*. The Children's Society. Available from: <https://www.understandingsociety.ac.uk/research/publications/525085>. [last accessed 06 February 2023].
- Pretorius, C., Chambers, D., & Coyle, D. (2019). Young people's online help-seeking and mental health difficulties: Systematic narrative review. *Journal of Medical Internet Research*, 21, e13873.
- RCEM. (2018). *National survey on mental health services for children and young people in the emergency department*. Royal College of Emergency Medicine. Available from: <https://www.rcem.ac.uk/docs/RCEM%20Guidance/RCEM%20National%20Survey%20on%20CAMHS%20Report%20v3%20final.pdf>. [last accessed 06 February 2023].
- RCEM. (2019). *Mental health in emergency departments*. Royal College of Emergency Medicine. Available from: <https://www.rcem.ac.uk/docs/RCEM%20Guidance/Mental%20Health%20Toolkit%202019%20-%20Final%20.pdf>. [last accessed 06 February 2023].
- RCGP, RCPCH, & RCP. (2017). *Intercollegiate position statement on children and young peoples' mental health*. Royal College of General Practitioners, Royal College of Paediatrics and Child Health, Royal College of Psychiatrists. Available from: <https://www.rcgp.org.uk/clinical-and-research/resources/toolkits/-/media/091AD9A8143B49BBBD5C21392139676F.ashx>. [last accessed 06 February 2023].
- Reliford, A., & Adebajo, B. (2018). Use of telepsychiatry in pediatric emergency room to decrease length of stay for psychiatric patients, improve resident on-call burden, and reduce factors related to physician burnout. *Telemedicine and E-Health*, 25, 828–832.
- Ridout, B., & Campbell, A. (2018). The use of social networking sites in mental health interventions for young people: Systematic review. *Journal of Medical Internet Research*, 20, e12244.
- Roberts, N., Hu, T., Axas, N., & Repetti, L. (2017). Child and adolescent emergency and urgent mental health delivery through telepsychiatry: 12-month prospective study. *Telemedicine and E-Health*, 23, 842–846.
- Rogers, S., Griffin, L., Masso, P., Stevens, M., Mangini, L., & Smith, S. (2015). CARES: Improving the care and disposition of psychiatric patients in the pediatric emergency department. *Pediatric Emergency Care*, 31, 173–177.
- Rotheram-Borus, M., Piacentini, J., Cantwell, C., Belin, T., & Song, J. (2000). The 18-month impact of an emergency room intervention for adolescent female suicide attempters. *Journal of Consulting and Clinical Psychology*, 68, 1081–1093.
- Rotheram-Borus, M., Piacentini, J., Van Rossem, R., Graae, F., Cantwell, C., Castro-Blanco, D., ... & Feldman, J. (1996). Enhancing treatment adherence with a specialized emergency room program for adolescent suicide attempters. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 654–663.
- Ryan, R., & Hill, S. (2016). *How to GRADE the quality of the evidence (Version 3.0)*. Cochrane Consumers and Communication Group. Available from: <http://cccr.org/cochrane.org/author-resources>. [last accessed 06 February 2023].
- Sale, R., Michael, K., Egam, T., Stevens, A., & Massey, C. (2014). Low base rate, high impact: Responding to teen suicidal threat in rural Appalachia. *Emotional & Behavioural Disorders in Youth*, 2, 4–9.
- Sara, G., Wu, J., Uesi, J., Jong, N., Perkes, I., Knight, K., ... & Bowden, M. (2022). Growth in emergency department self-harm or suicidal ideation presentations in young people: Comparing trends before and since the COVID-19 first wave in New South Wales, Australia. *The Australian and New Zealand Journal of Psychiatry*, 57, 58–68.
- Schoenwald, S., Ward, D., Henggeler, S., & Rowland, M. (2000). Multisystemic therapy versus hospitalization for crisis stabilization of youth: Placement outcomes 4 months postreferral. *Mental Health Services Research*, 2, 3–12.
- Sheidow, A., Bradford, W., Henggeler, S., Rowland, M., Halliday-Boykins, C., Schoenwald, S., ... & Ward, D.M. (2004). Treatment costs for youths receiving multisystemic therapy or hospitalization after a psychiatric crisis. *Psychiatric Services*, 55, 548–554.
- Shepperd, S., Harris, L., Bull, L., Doll, H., Fitzpatrick, R., Gowers, S., ... & Pollack, J. (2008). *Systematic review and mapping study of alternatives to inpatient care for children and adolescents with complex mental health needs*. Southampton, UK: National Coordinating Centre for NHS Service Delivery and Organisation R&D.
- SIGN. (2019). *Scottish intercollegiate guidelines network, methodology checklist 3; Cohort studies*. Available from: www.sign.ac.uk/what-we-do/methodology/checklists/. [last accessed 06 February 2023].
- Singh, S., Roy, D., Sinha, K., Parveen, S., Sharma, G., & Joshi, G. (2020). Impact of COVID-19 and lockdown on mental health of children and adolescents: A narrative review with recommendations. *Psychiatry Research*, 293, 113429.
- SURE. (2018). *Questions to assist with the critical appraisal of cross-sectional studies*. Available from: <http://www.cardiff.ac.uk/insrv/libraries/sure/checklists.html>. [last accessed 06 February 2023].
- Theodosiou, L., & Glick, O. (2020). *Peer support models for children and young people with mental health problems*. Centre for Mental Health. Available from: https://www.centreformentalhealth.org.uk/sites/default/files/publication/download/CentreforMentalHealth_PeerSupport_CYP_0.pdf. [last accessed 06 February 2023].
- Thomas, J., & Harden, A. (2008). Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*, 8, 45.
- Thomas, J., Novins, D., Hosokawa, P., Olson, C.A., Hunter, D., Brent, A., ... & Libby, A.M. (2018). The use of telepsychiatry to provide cost-efficient care during pediatric mental health emergencies. *Psychiatric Services*, 69, 161–168.
- Tufanaru, C., Munn, Z., Aromataris, E., Campbell, J., & Hopp, L. (2017). Chapter 3: Systematic reviews of effectiveness. In E. Aromataris & Z. Munn (Eds.), *JBI Reviewer's manual*. Adelaide: JBI. Available from: <https://reviewersmanual.joannabriggs.org/>. [last accessed 06 February 2023].
- UNICEF. (2021). *The state of the world's children 2021: On my mind – Promoting, protecting and caring for children's mental*

- health. United Nations Children's Fund Office of Global Insight and Policy. Available from: <https://www.unicef.org/reports/state-worlds-children-2021>. [last accessed 06 February 2023].
- Uspal, N., Rutman, L., Kodish, I., Moore, A., & Migita, R. (2016). Use of a dedicated, non-physician-led mental health team to reduce pediatric emergency department lengths of stay. *Academic Emergency Medicine*, 23, 440–447.
- Walter, H., Kaye, A., Dennery, K., & DeMaso, D. (2019). Three-year outcomes of a school-hospital partnership providing multitiered mental health services in urban schools. *Journal of School Health*, 89, 643–652.
- Walter, U.M., Petr, C.G., & Davis, S. (2006). Informing best practices for children in psychiatric crises: Perspectives and insights from families. *Families in Society*, 87, 612–620.
- Welsh Government. (2019). *Wales Crisis Care Concordat National Action Plan 2019–2022*. Welsh Government.
- Welsh Government. (2022). *Children and Adolescent Mental Health Service (CAMHS) funding*.
- Westberg, K., Nyholm, M., Nygren, J.M., & Svedberg, P. (2022). Mental health problems among young people: A scoping review of help-seeking. *International Journal of Environmental Research and Public Health*, 19, 1430.
- Wharff, E.A., Ginnis, K.M., & Ross, A.M. (2012). Family-based crisis intervention with suicidal adolescents in the emergency room: A pilot study. *Social Work*, 57, 133–143.
- Wharff, E.A., Ginnis, K.B., Ross, A.M., White, E.M., White, M.T., & Forbes, P.W. (2019). Family-based crisis intervention with suicidal adolescents: Arandomized clinical trial. *Pediatric Emergency Care*, 35, 170–175.
- WHO. (2019). *The WHO special initiative for mental health (2019–2023): Universal health coverage for mental health*. World Health Organization. Available from: <https://apps.who.int/iris/handle/10665/310981>. [last accessed 06 February 2023].
- WHO. (2021a). *Adolescent mental health*. World Health Organization. Available from: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>. [last accessed 06 February 2023].
- WHO. (2021b). *Comprehensive mental health action plan 2013–2030*. Geneva, Switzerland: World Health Organization. Available from: <https://www.who.int/publications/i/item/9789240031029>
- WHO. (2022). *World Health Statistics 2022: Monitoring health for the SDGs, sustainable development goals*. World Health Organization. Available from: <https://www.who.int/publications/i/item/9789240051157>. [last accessed 06 February 2023].
- Wilkins, C., Kelly-Dean, O., & O'Kail, A. (2019). *Charities, young people and digital mental health services*. Nominet. Available from: <https://www.thinknpc.org/resource-hub/charities-young-people-and-digital-mental-health-services/>. [last accessed 06 February 2023].
- Young Minds. (2018). *A new era for young people's mental health*. Young Minds. Available from: <https://youngminds.org.uk/media/2620/a-new-era-for-young-peoples-mental-health.pdf>. [last accessed 06 February 2023].
- Young Minds. (2022). *Amplified*. Available from: <https://www.youngminds.org.uk/professional/consultancy-and-service-design/case-studies/amplified/>. [last accessed 06 February 2023].

Accepted for publication: 19 December 2022