Mental health crisis care for children and young people aged 5 to 25 years: the CAMH-Crisis evidence synthesis

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Scientific summary

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Background

The mental health of children and young people (CYP) is a rising concern, with one in six children aged 5–19 years in England having a probable diagnosable mental disorder. A recent National Assembly inquiry found a 100% increase in demand for CYP mental health services in Wales between 2010 and 2014. With resources stretched, and CYP often waiting lengthy periods to be seen, increasing numbers of CYP are seeking help at a point of crisis. During periods of crisis, it is vital that care is timely, effective and based on evidence. Crisis care for CYP has become a national and international policy priority, with substantial funding allocated to the development of crisis services. The needs of young people in crisis can be met through clinical services, such as local child and adolescent mental health (CAMH) teams, crisis teams, and accident and emergency departments, or through school counselling, youth services and internet-based counselling. In the UK, the landscape of crisis care delivery has shifted substantially in recent years. Notably, investments have been made in community crisis teams that aim to provide care close to home and avoid the need for hospital admission. Different forms of crisis support from health, education, social care and the third sector are available for CYP, with considerable regional variability in the way such care is delivered. However, little is known about how these different services are organised or experienced, whether or not they are effective, or how they are integrated within their local system contexts.

Objectives

The review objectives of this study were to critically appraise, synthesise and present the best-available international evidence relating to crisis services for CYP aged 5–25 years. Specifically, we look at:

- the organisation of crisis services across education, health, social care and the third sector
- the experiences and perceptions of CYP, families and staff
- to determine the effectiveness of current models
- to determine the goals of crisis intervention.

Methods

The protocol was crafted following the guidance published by the Centre for Reviews and Dissemination at the University of York (York, UK). The protocol was then registered with the International Prospective Register of Systematic Reviews.

All relevant English-language international evidence specifically relating to the provision and receipt of crisis support for CYP aged 5–25 years, from January 1995 to January 2021, was sought. All records that related to the effectiveness, organisation and goals of services that respond to CYP in crisis, and to the experiences of people using and working in these services, were considered. At the first Stakeholder Advisory Group (SAG) meeting, help was obtained in developing a search strategy, ensuring that appropriate search terms were being used and assisting in the locating of otherwise unidentified sources of evidence, particularly grey literature. Types of evidence sought included quantitative and qualitative research, and grey literature.

Following the development and testing of a search strategy, comprehensive searches were conducted across 17 databases: MEDLINE ALL, PsycINFO®, EmCare, Allied and Complimentary Medicine Database, Health Management Information Consortium, Cumulative Index to Nursing and Allied Health Literature,

Education Resources Information Center, Applied Social Sciences Index and Abstracts, Sociological Abstracts, Social Services Abstracts, ProQuest Dissertations & Thesis database Open, Scopus, Web of Science (WoS), OpenGrey, Cochrane Central Register of Controlled Trials, Electronic Theses Online Service and Criminal Justice Abstracts. Supplementary searching was undertaken to identify grey literature and additional research material. This included the use of online searches, and the targeted searching of organisational websites and journal tables of content. Reference lists of included studies were scanned and forward citation tracking was performed using WoS.

The title and abstract of each record were reviewed by two members of the team to establish if a paper was relevant, with a third member arbitrating if there was no consensus. The full texts of each record were accessed when a decision about relevance could not be made on the abstract alone. All records deemed relevant on initial screening were then subject to a further review by two members of the team, again using a third team member for arbitration. A specifically designed form was used to guide this process.

Two team members appraised all the research reports that had been identified through screening, using critical appraisal checklists. When there were disagreements about quality, a third team member arbitrated. None of the grey literature was appraised for quality.

Demographic data from the appraised records were extracted into tables and checked by a second team member. All appraised research material and relevant extracts from the grey literature were managed using the NVivo 12 software (QSR International, Warrington, UK) from which it was thematically analysed.

A separate analysis was conducted for each objective. For objective 1, the types of crisis services/responses were categorised and summarised after consultation with the SAG. Next, thematic summaries that explored organisation of crisis services were conducted.

To meet objective 2, a thematic synthesis was conducted to explore the experiences and perceptions of young people, their families and staff with regard to mental health crisis services. The confidence in the synthesised findings from the qualitative research to address this objective was assessed by two reviewers using the Confidence in the Evidence from Reviews of Qualitative research (CERQual) approach.

The third objective was to determine the effectiveness of current models of mental health crisis services. Owing to the heterogeneity of the included intervention studies, meta-analyses could not be performed and, therefore, thematic summaries were conducted. The confidence in the certainty of the synthesised findings from the quantitative evidence was assessed by two reviewers using the Grading of Recommendations Assessment, Development and Evaluation approach.

The final objective was to determine the goals of crisis intervention, and this was achieved using thematic summaries.

Findings

One hundred and thirty-eight reports were used to inform this evidence synthesis, including 39 descriptive accounts on the organisation of crisis services (across 36 reports), 42 research studies (across 48 reports) and 54 grey literature documents.

For objective 1, the organisation of crisis services were categorised as follows: triage/assessment only, digitally mediated support approaches, and intervention approaches and models. There were triage/assessment approaches provided for CYP who presented at emergency departments, within educational

settings, via telephone triage and at out-of-hours mental health services. Digitally mediated support approaches were facilitated through telephone, text-based or online facilities. A wide variety of different intervention approaches have been described, including intervention approaches that started in the emergency department and then moved to outpatient services, inpatient care through hospitals or residential treatment centres (RTCs); home-based programmes; and CAMH-based services, using telepsychiatry or via a community resource (e.g. mobile outreach through to school hospital partnerships and generic walk-in crisis services provided by voluntary organisations). The thematic summaries on the organisation of crisis services highlighted four themes. These themes were (1) recommendations for initial assessment in the emergency department, (2) the importance of providing home- or community-based crisis support, (3) places of safety and (4) general characteristics of a crisis response. Guidance relating to how assessments are carried out in the emergency department focused on risk assessments and broadly followed National Institute for Health and Care Excellence guidelines. These assessments should be undertaken in separate age-appropriate areas and there should be clear follow-up pathways. Assessments should be undertaken by skilled professionals, with expertise within this client group, who receive appropriate training. When possible, crisis care should be offered as close to home as possible and so either at home or in community-based locations, recognising that families make an important contribution to the planning and provision of care. Places of safety need to be appropriately staffed, again, with experienced and trained professionals and, ideally, in a dedicated space so that the use of adult mental health facilities and police cells can be avoided. In general, crisis services should provide a timely response, be age appropriate, have a single point of access, be accessible and available 24 hours per day, 7 days per week, be responsive and needs led, involve multiagency working, be staffed by suitably qualified and experienced professionals, and involve crisis planning and risk assessment, using evidence-based practices.

For objective 2, the following four themes were identified: (1) barriers to and facilitators of seeking and accessing appropriate support (2) what CYP want from crisis services; (3) children's, young people's and families' experiences of crisis services; and (4) service provision. Twenty-seven synthesis summary statements were generated, of which only two were rated as having a high degree of confidence, 15 were rated as moderate and the remainder were rated as low or very low, using the CERQual approach. The statements of high confidence related to what CYP want from crisis services, which were centred around the need for different forms of support and pathways to services. This included support via telephone (via a direct line, with out-of-hours availability and staffed by trained counsellors), as well as via text and e-mail.

For objective 3, the findings are summarised by type of service and were generated from single heterogenous studies. Therefore, no meta-analysis was possible. Outcomes across the studies were graded as moderate for randomised controlled trials and very low for observational studies. Crisis services initiated within emergency departments were effective in reducing depression and improving family functioning or empowerment. CYP receiving these services were more likely to be referred to, and attend, intensive outpatient care and were less likely to be hospitalised. CYP reported greater satisfaction with services. Health-care staff were satisfied with some aspects of mental health crisis services that they provided, but were generally dissatisfied with the lack of out-of-hours availability. With regard to telepsychiatry initiatives, these initiatives were effective in decreasing length of stay (LOS) and costs, staff satisfaction was improved and parents reported high levels of satisfaction. When a dedicated mental health team was implemented in the emergency department, CYP were less likely to be hospitalised, LOS was decreased and CYP were more likely to return home. Carrying out assessment approaches within the emergency department brought success in prompting referral to community services. CYP who received mobile crisis services were less likely to attend the emergency department post discharge.

Home- or community-based programmes were effective in reducing depression, psychiatric symptoms and the number of suicide attempts and completed suicides. Moreover, home- and community-based programmes could improve self-concept, family adaptability or cohesion and were more cost-effective.

CYP receiving these services were more likely to remain in the community post treatment and less likely to be hospitalised, reporting greater satisfaction with services. CYP receiving outpatient mental health programmes were less likely to be hospitalised and experienced quicker access to additional resources. An association also existed between parental satisfaction and increased adherence to outpatient treatment.

Specific inpatient programmes for crisis care for CYP were effective in reducing psychiatric symptoms and suicidality, and improving psychosocial functioning. Both crisis programmes within randomised controlled trials and inpatient programmes were effective in reducing LOS and costs.

No completed suicides or suicide attempts were reported within educational settings when assessment approaches were introduced. A variety of referral destinations were noted and, in some cases, referrals to more acute levels of care were avoided. In addition, levels of staff satisfaction were high.

Seven clear goals of crisis intervention were identified for objective 4, that is, to (1) keep CYP in their home environment as an alternative to admission; (2) assess need and plan; (3) improve CYP and/or their families' engagement with community treatment; (4) link CYP and/or their families to additional mental health services, as necessary; (5) provide peer support; (6) stabilise and manage the present crisis over the immediate period; and (7) train and/or supervise staff.

Summary

Despite multiple approaches to the organisation and provision of mental health crisis care, there was moderate evidence that CYP and their families did not know how to access such services and may not have been be eligible because of threshold criteria. Even when accessing services, some CYP were not able to talk while they are in crisis and there was high-quality evidence that alternative methods of communicating, such as text, telephone and online provision, as welcomed. There was moderate evidence that CYP would like access to peers at this time or access to age-appropriate out-of-hours services. Attendance at an emergency department was the default service, given the lack of alternatives, and this was experienced as stressful, noisy, busy and generally unsuitable for the CYP. There was evidence to suggest that much of the care provided in an emergency department was effective, and reasons for this included improvement of family functioning following a crisis service, intervention initiated in the emergency department, increased referral for the CYP to intensive outpatient care post emergency department, increased satisfaction with crisis service, reduction in psychiatric symptoms and improving psychosocial functioning, and no increase in rate of attendance for crisis care after being seen in emergency department. However, being seen in an emergency department for a mental health crisis is not the policy preference in the UK.

Limitations

The literature that informed this evidence synthesis was largely drawn from the USA. Any models or approaches of crisis care operating in the USA may not be directly applicable to the UK because of differences in the way that health care is commissioned and delivered in the USA compared with the UK. In addition, a wide range of crisis provision was reported across many different settings, which made comparison of these models difficult. Therefore, it was not possible to determine their relative efficacy, meaning that only general conclusions can be drawn.

Future work

As only three research studies included in this evidence synthesis had been completed in the UK, a clear case exists for the commissioning of new high-quality studies to investigate discrete aspects of service delivery of crisis care in the UK to generate knowledge about the efficacy and acceptability of these models. It would also be helpful to investigate models of peer support during crises, as this was an aspect welcomed by CYP.

Attempts could be made to discern the distinct needs of particular subgroups of CYP and which types of crisis intervention models are more effective for them. This is particularly pressing given the proliferation of service responses to crisis and the relative absence of a programme of research to evaluate the varying models on offer.

Findings suggest that support prior to the point of reaching crisis point is important, but further research needs to identify precisely which kinds of community support would be most effective in preventing CYP from reaching crisis and/or feeling the need to attend an emergency department.

Study registration

This study is registered as PROSPERO CRD42019160134.

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