Review of the impact of mass disruption on the wellbeing and mental health of children and young people, and possible therapeutic interventions: Executive Summary

1. Research aims

1.1 The aim of this Rapid Evidence Assessment (REA) was to explore the impact of disasters that have caused mass disruption (including school closure) on the wellbeing and mental health of school-aged children and young people (aged 3 to 18 years). Risk and protective factors for children and young people’s mental health were explored, and the effectiveness of post-disaster interventions were highlighted.

1.2 The purpose of this REA was to provide evidence to inform policy decisions about support for school aged children following the COVID-19 pandemic. This REA addresses an immediate policy priority to understand the potential impacts of lockdown on pupil wellbeing to inform considerations about what support will be needed when schools re-open and whether support needs will differ between primary and secondary schools.

1.3 COVID-19 research was investigated, however due to the recency of this current pandemic, research was sparse and could only provide information about the short-term impacts of the pandemic. Consequently, it was necessary to also explore international disaster research to understand more about the impact of mass disruption on the mental health and wellbeing of children and young people, and the longer term impacts of disasters, as well as the effectiveness of interventions. This REA provides a review of international literature on previous disasters and emerging COVID-19 research, to demonstrate the emerging and anticipated impacts of disasters on children and young people’s mental health, as well as highlighting which interventions could be beneficial for supporting post-COVID-19 recovery.
Accordingly, the following questions were examined:

(1) How have disasters and the closure of schools affected the wellbeing and mental health of children and young people, and have any risk or protective factors been identified, in relation to (a) COVID-19 research, and (b) international disasters research?

(2) With previous international disasters, what therapeutic interventions were used to improve the mental health and wellbeing of children and young people, and were they successful or not?

2. Methodology

2.1 The Welsh Government Library Service conducted literature searches and sourced the literature. The literature search used broad search terms to understand the breadth of relevant research about children and young people’s post-disaster mental health and wellbeing, and possible therapeutic interventions. Key search terms included: disaster, schools, mental health, interventions, and children/young people. The literature search focused on articles published in English in the last 20 years, from high income countries, to ensure research articles were contemporary and had greater applicability to the UK. The literature search identified 287 articles, and after two screening processes, 71 articles were included in the REA. After the literature was reviewed, the REA was peer reviewed by Prof. Stephan Collishaw and Prof. Simon Murphy, University Professors who are specialists in the mental health of children and young people. The Professors both peer reviewed an early draft of this REA, and their comments and recommendations were used to improve and finalise this REA.

Limitations

2.2 The REA aimed to provide a rapid synthesis of available evidence to support emerging policy needs. As such this literature review was not exhaustive and due to time constraints did not follow a full systematic review process.

3. Key findings

3.1 Two questions were asked of the literature, and examination of the available literature resulted in these key findings:

(1) How has mass disruption and the closure of schools affected the wellbeing and mental health of children and young people, and have any risk or protective factors been identified, in relation to (a) COVID-19 research and (b) international disasters research?
(a) COVID-19 research

3.2 International research included two studies from China that found high rates of depressive and anxiety symptoms amongst school-aged children who were confined to their homes.

3.3 Studies from Italy and Spain suggested that isolation has changed children’s behaviour, and led to an increase in children’s behaviour problems (e.g. problems concentrating, irritability and hyperactivity) and worries, although positive outcomes such as more prosocial behaviour and reflection were also reported.

3.4 International research also suggested that it is specifically isolation, rather than worries about infection risk or school closures, that is related to parent and child mental health difficulties.

3.5 International research suggested that parental wellbeing during isolation is related to children’s wellbeing, with the children of parents who are experiencing the most difficulties during isolation more likely to have greater behavioural difficulties.

3.6 UK research has suggested that COVID-19 is adversely affecting the mental health of children and young people, with child and parent reports demonstrating children’s COVID-19 related worries.

3.7 In the UK, children from lower socio-economic backgrounds seem to be at greater risk of falling behind in their education compared to peers.

3.8 Limited research suggested that UK children with additional needs seem to be at risk of greater mental health difficulties.

3.9 Limited evidence suggested that secondary school aged children are more likely to have greater wellbeing and mental health difficulties than primary school aged children.

3.10 There are a number of limitations to the COVID-19 research identified in this REA: (1) several studies have used survey data involving samples that are not nationally representative; (2) most studies lack baseline pre COVID-19 data; and (3) several studies do not use standardised validated screening measures for mental health.

3.11 Future COVID-19 research is needed that has pre-COVID-19 mental health data, standardised questionnaires, representative samples, and longitudinal or follow-up data.

(b) International disasters research

3.12 Most disaster research identified in the literature review focused on disasters such as earthquakes, hurricanes and tornados, and therefore findings may not be fully applicable to the COVID-19 pandemic.

3.13 Numerous disaster research studies have demonstrated that both primary school and secondary school aged children that have been exposed to disasters suffer from mental health difficulties, in particular post-traumatic stress disorder (PTSD), post-traumatic stress symptoms (PTSS) and depression.

3.14 Even children that have had indirect exposure to a disaster through the media can experience PTSD and PTSS.
Research exploring the role of age in relation to post-disaster mental health difficulties has been mixed; overall it appears that older children have a greater risk of developing PTSD or PTSS, but not depression, compared to younger children.

The relationship between older age and greater PTSS and PTSD could be influenced by exposure, with older children potentially more likely to experience and understand the effects of a disaster.

As well as older age and exposure, other risk factors for greater post-disaster mental health difficulties included experiencing isolation or quarantine, parents’ mental health, and children’s pre-existing mental health difficulties.

The risk factors identified in this REA were those that emerged from the literature reviewed, and do not represent an exhaustive list.

The literature included here was limited to disaster literature published in the last 20 years from high income countries (see Methodology), which means that some literature, including high quality studies looking at AIDS/HIV pandemics and war or civil conflict were not included.

(2) With previous international disasters, what therapeutic interventions were used to improve the mental health and wellbeing of children and young people, and were they successful or not?

Research has shown that children that have well-developed cognitive skills (attention and inhibition) and coping strategies tend to have less post-disaster mental health difficulties, and show higher levels of posttraumatic growth (positive psychological change as a result of adversity).

Post-disaster school level interventions were often identified; they involve whole school changes that focus on supporting their pupils’ mental health, and seem to be successful in reducing mental health difficulties and increasing prosocial behaviour and adaptive behaviours such as coping.

Community spirit or solidarity can be important for children, and community projects involving art therapy and story-telling seem to be successful in reducing mental health difficulties.

Positive social support from parents and peers following a disaster can reduce children’s mental health difficulties, and one study suggested that face-to-face social support seems to be more effective than virtual support.

Specific therapies such as Cognitive Behavioural Therapy (CBT) and Eye Movement Desensitization and Reprocessing (EMDR) have been shown to reduce depression and PTSD in children recovering after disasters.

Few interventions involved randomised control trials, which reduces the robustness of the research into their effectiveness, however it should be noted that randomised control trials are often not possible because of the ethical sensitivities surrounding the identification of a control group (i.e. choosing which children should and should not receive an intervention when all are in need of support).
3.26 It is important to consider the transferability of these disaster interventions to the COVID-19 pandemic, however there are similarities between the findings of COVID-19 research and international disasters research, and some researchers have stated that the COVID-19 pandemic involves many of the characteristics of mass trauma events.

4. Recommendations

4.1 1. Interventions in Wales should be evidence-based, informed by the findings in the REA, and should be evaluated to understand how effective they are in the Wales context, and why.

4.2 2. Further research is needed to understand the impact of the COVID-19 pandemic, and which interventions are the most appropriate. A follow-up to this REA in approximately six months, which addresses gaps due to the rapidity of this REA, as well as reviewing new COVID-19 research to better understand the impact of the pandemic on children and young people, is advised. In particular, this follow-up REA could include research about pandemics or disasters from more than 20 years ago that could be relevant, and research from previous international disasters (and perhaps new COVID-19 research) that addresses the impact of the family environment and relationships.

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Views expressed in this report are those of the researchers and not necessarily those of the Welsh Government

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