Exploring The Role Of Resilience In Rates Of Self-Harm And Suicide During The Covid-19 Pandemic And Beyond

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Abstract

Self-harm, as defined here, includes 'self-poisoning or self-injury, irrespective of the apparent purpose of the act'. Although it is distinct from suicidal thoughts and behaviours, there is overlap, with research suggesting it can act a precursor to future suicide. The start of the COVID-19 pandemic saw much discussion about the potential impact on suicide in the United Kingdom. Two years on, and rates of self-harm and suicidal thoughts and behaviours have been mixed, tentatively failing to find substantial changes from pre-pandemic levels, despite periods of lockdown and months of uncertainty. Resilience provides a lens to consider these emerging findings, by considering the protective factors that support individuals from adverse outcomes of challenging situations such as the COVID-19 pandemic. Drawing on models of resilience (Masten et al., 2021; Stainton et al., 2019), this paper explores how this complex, multi-faceted construct may begin to explain the trends emerging from the COVID-19 literature, while also providing considerations for the post-pandemic years. Challenges for current resilience research are presented, such as the limits of static measures of resilience and the need for methods that capture the nature of resilience as being a multisystem, dynamic process. The article concludes that antecedents for self-harm and suicidality are wide-ranging, with resilience to these thoughts and behaviours existing in an interconnecting web of levels across society. It is, however, difficult to fully assess these networks with the measures of resilience that are most widely used. The intra- and inter-personal challenges and inequalities that existed pre-pandemic may be exacerbated as the longer-term economic repercussions become known; thus, highlighting the importance of heightened solidarity and support to promote and protect resilience in individuals and communities most at risk of self-harm and suicide. To do this, we must take advantage of longitudinal studies using methods such as Experience Sampling Methodology (i.e., digital diaries) to fully understand the interaction of risk and protective factors across contexts and time.

Introduction

Self-harm (i.e., 'self-poisoning or self-injury, irrespective of the apparent purpose of the act') and suicide were major public health concerns even before the COVID-19 pandemic (Hawton et al., 2003; Tsiachristas et al., 2017). Globally, 700,000 people die from suicide each year and previous research suggests that people with a history of self-harm have a 30 times greater risk of suicide (Hawton et al., 2020; Hawton et al., 2012; World Health Organization, 2021). It was feared that COVID-19 may particularly affect people vulnerable to self-harm and suicide due to containment measures such as self-isolation and social distancing, as well as disruption to services, and economic uncertainty (Keyworth et al., 2022).

Figure 1: COVID-19 lockdown policies in the UK

Theoretical background

Drawing on the interpersonal theory of suicidal behaviours (Joiner, 2007), two key psychological components are perceived burdensomeness and sense of low belonging. Job losses and inability to provide for oneself and loved ones may contribute to perceived burdensomeness (Gratz et al., 2020). Moreover, work and friendship are important sources of social connection, providing a sense of belonging (Van Orden et al., 2010; Zareian & Klonsky, 2020). Stay-at-home orders limited meaningful relationships with others, particularly for individuals living alone or in challenging environments (Gratz et al., 2020).

Similarly, self-harm is often seen as a maladaptive coping strategy for dealing with the negative affect arising from a combination of interpersonal and intrapersonal factors (Chapman et al., 2006; Klonsky, 2007; Nock, 2009). The circumstances for self-harm are heightened by the interaction of distal and proximal events (O'Connor & Nock, 2014), and the

influx of negative proximal events at the start of the pandemic was of great concern for rates of self-harm, especially for those already vulnerable (Fegert et al., 2020).

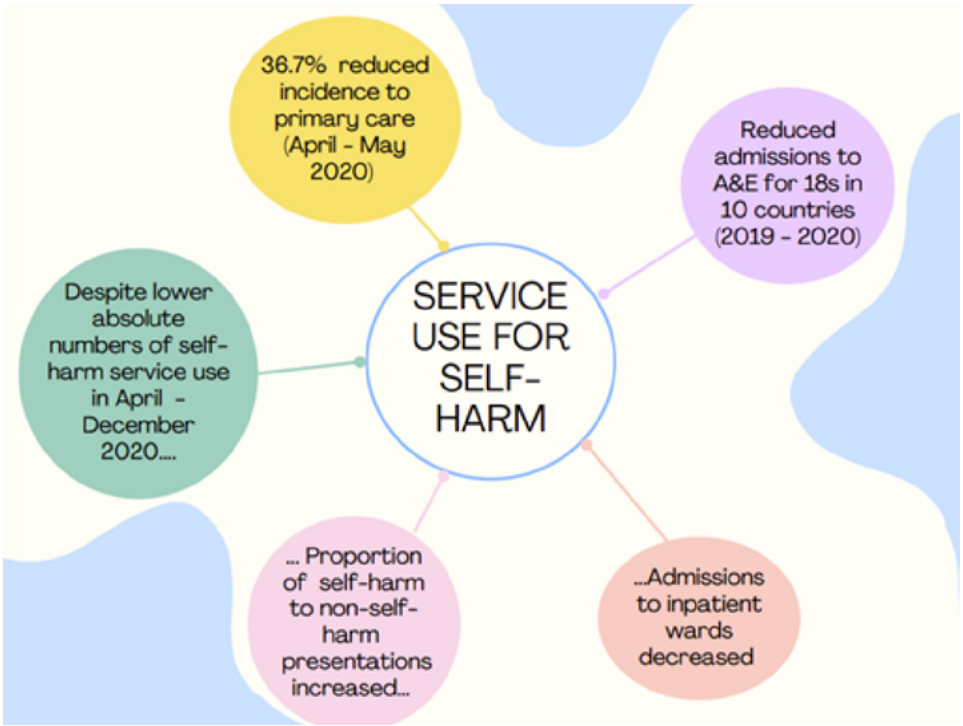
Self-harm and suicide during the COVID-19 pandemic

Despite these strong theoretical concerns, overall rates of self-harm and suicidal thoughts and behaviours during the COVID-19 pandemic have been mixed in the United Kingdom (UK), tentatively failing to find substantial changes from pre-pandemic levels, despite periods of lockdown and months of uncertainty (Carr et al., 2021; John et al., 2020). These conclusions are largely based on case series and service utilisation (e.g., visits to emergency departments or primary care services). Limited numbers of high quality observational studies with participant-reported measures have pre-pandemic data for comparison (Knipe et al., 2021; Rogers et al., 2021).

Service use

During the early stages of the pandemic, and waves that included nationwide stay-at-home orders, absolute numbers of presentations to UK mental health services for self-harm and suicide decreased or remained the same as previous years (DelPozo-Banos et al., 2022; Ougrin, 2020; Shields et al., 2021). Possible explanations include not wanting to be add to NHS pressures, fear of contracting COVID-19 in hospital (Pirkis et al., 2021; Wasserman et al., 2020), and stricter requirements for inpatient admission (DelPozo-Banos et al., 2022). Self-harm presentations in primary care returned to pre-pandemic levels in September 2020 (i.e., the wider reopening of services and society; Carr et al., 2021).

Figure 2: Service use for self-harm



Suicide rates
Using data from official government sources, a study of 21 middle-high income countries found that rates of suicide did not change, or dropped, between April to July 2020 compared to 3 months before the COVID-19 pandemic (Pirkis et al., 2021). In England and Wales, data from the Office for National Statistics (2022) reported a 9.2% decrease in suicides between April and December 2020, compared to the corresponding 2019 period. Male suicides were lower during this period than 2018 and 2019, whereas female rates showed no statistically significant changes. Month-by-month trends did not find any peaks of suicide during periods of greatest lockdown measures.

Self-harm and suicidal ideation
Despite decreased service use and completed suicides, level of suicidal thoughts and community distress may have increased compared to pre-pandemic levels, according to self-report questionnaires (John et al., 2020). Distress may have been further heightened in individuals with a history of self-harm and greater COVID-19-specific fear (Keyworth et al., 2022).

I. Disproportionate impact within sociodemographic groups
UK-based studies found that lockdown may adversely impact certain groups, with an increase in self-harm presentations by boys and looked after children during strict lockdowns, and a decrease in attendance by children from deprived neighbourhoods (Wong et al., 2022). During the first national lockdown, past week suicidal ideation increased with highest rates for young people, individuals with low socio-economic status and those with pre-existing mental health problems (O'Connor et al., 2021). Across the six weeks, the same study did not find significant differences in past-week self-reported self-harm and suicide attempts.

II. Comparison with previous epidemics
Overall, findings match trends found in previous infectious disease epidemics, such as SARS and Ebola, for suicide attempts (using data from coroner's reports and hospital-level data), self-harm (primarily presentations to emergency departments) and self-reported thoughts of self-harm/suicide (Rogers et al., 2021). Case studies have found similar antecedents to suicidal thoughts and acts: fear of infection, financial struggles, social isolation (John et al., 2020; Rogers et al., 2021).

Introducing resilience: some definitions

Resilience provides a lens to consider these emerging findings and future directions, by considering the protective factors that support individuals from adverse outcomes of challenging situations such as the COVID-19 pandemic. There is some consensus that resilience is a dynamic process rather than a static personality trait (Anderson & Priebe, 2021; Fritz et al., 2018; Masten et al., 2021). Resilience is commonly conceptualised as overcoming or bouncing back from the distress that results from adversity rather than an absence of psychopathology or withstanding adversity with minimal distress (Anderson & Priebe, 2021; Mesman et al., 2021). Most researchers agree that resilience is comprised of two components: 1) adversity, which can range from traumatic life events to daily hassles, and 2) positive adaptation, tailored to the adversity being faced and the cultural frame the competence

occurs (i.e., an ecologically sensitive approach or emic perspective; Fletcher & Sarkar, 2013; Mesman et al., 2021).

Resilience is perhaps best understood as a multimodal or multisystemic, dynamic process, underpinned by several protective mechanisms that work together across individuals and communities (Masten et al., 2021; Stainton et al., 2019). As a dynamic concept, resilience can fluctuate over time, but adaptation to adversity can be improved through the implementation of resilience-enhancing factors (e.g., helpful coping skills, social support), existing at an individual and community level (Fritz et al., 2018).

Resilience during the COVID-19 pandemic

Resilience-enhancing factors during the pandemic included harnessing social support via technology, spirituality, and distraction techniques such as work or education (Labrague, 2021; Ogueji et al., 2021; Simblett et al., 2021). Triggers for self-harm and suicide are wide-ranging, with protective factors expected to vary within and between people (Ernst et al., 2022; Khan & Ungar, 2021; Zadravec Šedivy et al., 2017). Indeed, some triggers for young people who self-harm (e.g., bullying or school pressures) may have reduced during the initial periods of lockdown, cautiously providing a possible explanation for reduced presentations to hospital between March and May 2020 compared to 2019 (Ougrin, 2020).

Drawing on Walsh's (2015) work on family belief systems that foster resilience, protective factors include meaning-making of adversity, hope and spirituality. Families incorporating changes into their new routine may have better adapted to adversity (Prime et al., 2020). Staying at home and a slower pace of life may have reduced some triggers for self-harm and suicidal thoughts and behaviours. Family identification was found to protect against suicidal thoughts and behaviours resulting from financial stress during the COVID-19 pandemic (Stevenson & Wakefield, 2021). For others, particularly those in unsafe (e.g., domestic violence), unstable or lone households, the risk may have increased, especially if access to resilience-enhancing factors (e.g., access to outside support networks or services) was greatly reduced (Paul & Fancourt, 2022).

Resilience across cultures and contexts: Research gaps

Resilience-enhancing factors may vary across cultures. A review of resilience to self-harm within marginalised youths in low- and middle-income countries (LMICs) before the COVID-19 pandemic found that social support, positive youth development and religiosity were the most reported protective factors (Khan & Ungar, 2021). The review highlighted a gap in our knowledge of non-Western countries and it is unclear if these protective strategies could be used during periods of social distancing and lockdown in LMICs. This is particularly important given that poorer, rural communities face connectivity barriers, such as access to telehealth care, remote education, or social contact via social networking and technology (Esteban-Navarro et al., 2020; Hirko et al., 2020).

Unfortunately, most research on suicidality during COVID-19 has been conducted in high-income countries (Pirkis et al., 2021), and studies in LMICs have been rated of poorer quality

(Knipe et al., 2021). This is concerning, given that 77% of global suicides are thought to occur in LMICs and the economic impact of the pandemic makes LMICs particularly vulnerable to an increase in suicide (Shoib et al., 2022; World Health Organization, 2021). Understanding the role of community resilience, already identified as a protective measure from previous health epidemics and adversities, may be particularly important in LMICs (Atallah et al., 2018; Hansen-Nord et al., 2016).

Longer-term impact of COVID-19 and the role of resilience

As societies enter post-COVID recovery periods, predicted global recessions will impact many areas of life (Bastiampillai et al., 2020; Efstathiou et al., 2022). This is particularly concerning as the accumulation of multiple stressors pose the greatest risk for self-harm and suicidality (Carbone et al., 2021; McManus et al., 2019). Previous research on cumulative lifetime adversity and resilience in daily life has found a U-shaped relation (Seery & Quinton, 2016; Seery et al., 2010). Specifically, exposure to some lifetime adversity helps people to adapt to recent adverse events in a positive way as compared to experiencing no adversity, but too much lifetime adversity leads to negative outcomes (e.g., distress, posttraumatic stress). Taking a multisystem approach to resilience, increases in adversity across different, networked systems have negative implications for individuals, as it becomes more difficult to withstand the negative effects on their mental health (Masten et al., 2021).

During the pandemic, many Western governments provided financial support to provide against the economic shocks using emergency measures, temporarily alleviating some stressors. In the UK, many of these emergency measures ended in September 2021, and there is a risk that the return of previous or new stressors caused by economic instability (e.g., job insecurity, rising cost of living) may lead to an increase in self-harm and/or suicidality, particularly for people who have experienced high levels of lifetime adversity. Indeed, these trends have been observed in previous economic recessions (Sinyor et al., 2017).

Future research directions and conclusion

Future research should aim to capture resilience in real-time, in different contexts (Anderson & Priebe, 2021; Mesman et al., 2021). Individuals may deal with adverse situations or daily hassles in different ways, and support should be adaptable to these different contexts. Longitudinal studies using Experience Sampling Methodology (i.e., digital diaries) can help us better understand the 'cascade effects' of a stressful event and its link with resilience and mental health (Mesman et al., 2021). Qualitative studies can also explore in greater depth the challenges and resources that individuals draw on during times of adversity. Finally, data on self-harm and suicidality during non-epidemic *and* epidemic periods would better enable comparisons over time and enhance the quality of research evidence (Knipe et al., 2021; Rogers et al., 2021).

To conclude, the impact of the COVID-19 pandemic on rates of self-harm and suicide is not yet clear. It is a critical time to identify key protective factors for individuals most at risk, drawing on recommendations from comprehensive, high quality research (e.g., Wasserman et al., 2020). There is unlikely to be a single solution and it must be person-centred, requiring

research to better capture resilience as a process rather than a single measure of resilience in one survey, at one point in time. Research should continue to move away from a sole focus on individual psychological resilience, to a multisystem approach that considers community-level factors and the ecosystems in which individuals exist; within and across low-, medium- and high-income countries.

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