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terror attacks: Serious problems identified after the 2005
London Bombings still remain**

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Responding to mental health needs after mass casualty terror attacks

Serious problems identified after the 2005 London Bombings still remain

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Introduction

The high risk of psychological conditions such as posttraumatic stress disorder (PTSD), depression, and anxiety disorders in people present at a terror attack is now well established.[1–4] As outlined in U.K. national guidance [5] health services should plan for short-term psychosocial support and longer-term mental health treatment for the significant minority who need it. International studies repeatedly find that existing mental health provision does not adequately identify and treat this latter group; consequently there are high levels of long-term morbidity. The response to the 2005 London bombings developed a new approach to overcoming these problems but identified significant organisational challenges, most of which remained at the time of the Manchester Arena bombing in 2017.

The design of a mental health response should take into account the nature of the terrorist event, including: (1) Localised vs. dispersed populations: the latter require extensive efforts to identify those affected. Where the population is localised the impact on the geographical community should be carefully considered; dispersed populations may form important virtual communities. (2) The demographic characteristics of those affected: Age and ethnicity, for example, will determine the different agencies and groups that should be involved. (3) The ripple effect: how the attack has exposed professional groups, including telephone operators and first responders, to risk. (4) Ongoing criminal, legal, and memorial processes that will affect the course of recovery and create additional support needs.

There are routine organisational challenges that must always be faced. These involve: specifying a responsible lead and chain of command; obtaining funding; providing reassurance, guidance, and messaging on trauma responses aimed at health services, other organisations and the public; and identifying those affected and creating information-handling arrangements that are flexible but compliant with data protection legislation. A response must be coordinated across agencies, including health services, 3rd sector and voluntary organisations to: determine who has mental health needs (either present immediately or likely to emerge subsequently); arrange equal access to evidence-based care; and monitor usage and outcomes to determine effectiveness.

London bombings, 2005

In 2005 there was little consideration of mental health in major incident plans, and few specific expectations other than that routine mental health services would be sufficient to manage additional demand. After the attacks, an NHS Trust and mental health policy unit sought Department of Health funding for a 'screen and treat' programme.[6] Innovations included a centralised team that disseminated information about responses to trauma, collated information about affected individuals, and identified those with related mental health difficulties through an outreach and screening programme. Individuals were screened for PTSD and other reactions, with more detailed assessment of those screening positive, leading to the option of referral for treatment.

The programme confirmed previous international findings that survivors of terrorist attacks with mental health problems were unlikely to be detected via conventional routes such as primary care, thus necessitating outreach. Access to specialist services was inconsistent; existing referral pathways and financial contracts were sometimes a barrier. It established that it was acceptable to contact individuals via the screening programme, that treatment of this group led to positive outcomes of the magnitude reported in randomised controlled trials (RCTs), and that a central team could facilitate equal access to treatment resources and monitor outcomes and costs.[7]

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3 However, barriers to an effective response [8] included the lack of central institutional planning for
4 mental health needs following such incidents, reflected in lack of clarity over responsibility for the
5 response and lack of any funding for the considerable extra activity that was required (the Trust was
6 obliged to operate 'at risk' for most of the programme). There was widespread failure to share data
7 about affected people, even within the NHS, due to concerns raised by the Data Protection Act. No
8 strategy for data collection and management also meant that to this day it is not known how many
9 people were affected by the incidents and who they were.
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12 *Learning from subsequent terrorist attacks*

14 After the terror attacks in Oslo and Utøya Island (2011), the survivors, mainly young people,
15 dispersed across the country. Municipal crisis teams contacted all survivors directly after the attack
16 and appointed a municipal contact person to ensure continuity and set up screening assessments.
17 One in six survivors reported that they did not have a contact person in the first 4–5 months, while
18 nearly half had no contact with this person 5–15 months after the attack. No contact was associated
19 with lower use of mental health services, and 20% of survivors who did not receive mental health
20 services had clinically significant mental distress.[9] The response was notable for including
21 survivors' family members in its outreach, finding high levels of psychopathology.[10] Failure of
22 outreach to parents was associated with non-intact family structure and non-Norwegian origin.[11]
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26 After the 2015 terrorist attacks in Paris, individuals who were suffering from psychological disorders
27 but had not received mental health support were only identified via outreach activities.[12] Among
28 civilians who reported at least one mental health diagnosis, 70% and 30% of those indirectly and
29 directly threatened, respectively, had received no mental health support. British survivors were
30 included in a screen and treat programme set up by the U.K. Department of Health after the 2015
31 terror incidents in Tunisia, Paris and Brussels.[13] The mobilisation of this programme encountered
32 considerable delay, commencing over a year after the first attack, and was impeded by failure of
33 organisations to share data on those affected. Of those identified approximately 40% returned
34 screening questionnaires, and of these 92% screened positive.
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37 *Manchester Arena, 2017*

39 Following this attack, which killed 22 children and adults and physically injured a further 239, access
40 to data was difficult, but lists of some of those affected were eventually shared between the concert
41 promoter, the NHS acute care sector, Greater Manchester Police, and voluntary and community
42 organisations. Local commissioners agreed to underwrite finances until a national settlement was
43 agreed, and a centralised outreach and screening service, the Manchester Resilience Hub, was
44 mobilised within three months. The Hub carried out extensive consultation with schools, local
45 services, and the media to share information about trauma responses. As over 80% of the Hub's
46 clients live outside of Greater Manchester, clinical triage is facilitated by an online tool to allow fast,
47 large-scale screening and facilitate regular follow-up. The questionnaires used have established cut-
48 offs for clinically significant scores, these scores and risk criteria (for example, suicidal ideation and
49 reporting no current psychological support) were used to identify those in need of further support.
50 Clinically significant difficulties at initial registration ranged from 55% of adults meeting criteria for
51 possible PTSD, to 90% with anxiety. Significant difficulties for children and young people ranged from
52 25% with depression to 83% with possible PTSD. The Hub does not routinely provide psychological
53 therapy; instead, clinicians offer telephone/email support and refer clients to local evidence-based
54 psychological therapies recommended by the UK National Institute for Health and Care Excellence
55 (NICE) [14]. The Hub also holds regular event days around the country, offering support and
56 information to those affected, and conducts some face-to-face assessments for families who have
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3 complex needs, and a limited amount of direct therapy. Access to therapies is typically reliant on
4 existing regional NHS mental health services, with no provisions made to support the additional
5 demand. Access to specialist trauma-focused interventions across different geographical regions has
6 been highly variable, particularly for children and young people. The exact number of people at the
7 Arena that night is estimated at 19,000. Almost 2 years after the incident over 3500 people have
8 registered, representing approximately 18.6% of those present, demonstrating the need for further
9 improvements in identification and outreach to those affected.
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12 13 14 *13 years on: Where are we now?*

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16 There have been significant improvements internationally in awareness of mental health needs
17 following terrorist attacks, and more detailed clinical plans. In England there is now clear leadership
18 of the clinical response by the Department of Health and regional offices of NHS England. Despite
19 lacking a formal evidence base, messaging targeted at the public coupled with centralised outreach,
20 screening, and monitoring of individuals are recognised as potentially appropriate aspects of a
21 proactive response designed to prevent untreated morbidity and ensure equality of access to
22 treatment.
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25 Among the barriers identified following the London 2005 attacks, the lack of involvement of mental
26 health services in UK emergency response pre-incident planning exercises,[5] and the absence of
27 pre-agreed funding and national financial mechanisms to support the extra administrative, outreach,
28 and treatment costs of emergencies remain. In addition to the considerable time needed to organise
29 a response, this lack creates a large additional workload associated with seeking funds, reduces
30 efficiency, and introduces uncertainty at a time when recruitment of additional staff and careful
31 future planning are needed. Local Trusts should not have to operate 'at risk' in responding to
32 incidents which may involve survivors from across the U.K. and beyond. Commissioning
33 arrangements should recognise that incidents may require a coordinated national response.
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36 Data sharing barriers within and across organisations continue to seriously impede the identification
37 and clinical management of affected persons. This has been a feature of all U.K. terrorist attacks
38 including the multiple 2017 attacks in London, despite the fact that only a small minority object in
39 principle to data sharing taking place.[13] In 2007, non-statutory guidance from the Cabinet Office
40 [15] clarified that under the U.K. Data Protection Act personal information that was in the
41 individual's interest could be legally shared but organisations, including the NHS, have not complied.
42 The involvement of the Information Commissioner's Office and even legislation may be needed to
43 overcome entrenched practices and ensure that the 2018 EU General Data Protection Regulation
44 does not continue the trend of impeding care for survivors.
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48 Another barrier concerns the lack of a central mechanism to initiate a health register post-incident.
49 A central register is one of the very few practical ways of bringing together personal data from
50 different organisations such as the police, health services, and commercial organisations, as well as
51 permitting self-registration, however local or dispersed the survivors are. A limited physical health
52 register was adopted after the 2005 London bombings,[16] and a voluntary register was successfully
53 trialled for French nationals involved in several major disasters.[17] In contrast with local
54 government or health provider organisations, national agencies such as the U.S. Centers for Disease
55 Control and Prevention have the technical knowledge and experience to rapidly mobilise such
56 registers when required. In the U.K., work on a health register protocol for major incidents was
57 initiated in 2012 by Public Health England [18] but has not been completed. Such a register would
58 improve subsequent outreach attempts using mobile phone and email contact.
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Addressing these challenges

Although RCTs are rarely feasible, clinical understanding about how to support and treat survivors of major incidents is reasonably advanced.[19,20] However, care is often not being delivered adequately because of organisational and institutional failings.

This calls for a series of actions including:

- Creating updated policy and guidance on designing, planning, and delivering psychosocial and mental health care following mass casualty incidents, and integrating this into pre-incident planning and exercises of all responsible authorities including schools/colleges.
- Identifying funding in advance and establishing agreements in principle with commissioners, to enable local services to activate plans quickly and provide services for sufficient periods. This is essential to prevent dilution of existing mental health services.
- Revisiting the requirements and regulations for effective information sharing across agencies with robust mechanisms agreed in advance to ensure data sharing occurs in a frictionless and timely manner.
- Completing and implementing plans for a health register to detect as many affected persons as possible and ensure the effective delivery of care.

It is striking that although the mental health consequences of major incidents frequently exceed the physical, and last for much longer, they have historically attracted much less in the way of planning and resources. We see it as imperative that the organisational challenges are addressed as a matter of urgency and that psychosocial and mental healthcare responses are fully integrated into all advance planning for emergencies, disasters and major incidents.

KEY ISSUES BOX:

1. Active outreach and mental health screening to identify those in need of further support following terrorist attacks have been utilised in multiple international responses since the London 2005 bombings. Although there is a need for further research into their effectiveness they provide a practical solution to the high levels of untreated morbidity that follow from relying on existing mental health services.
2. However, crucial barriers remain and these should be addressed urgently, including:
 - a. lack of pre-established arrangements for financial provisions and data sharing
 - b. no centralised system for recording survivors who may be in need of support, and allowing survivors to self-register
 - c. lack of appropriate and flexible care pathways by which trauma-focussed psychological interventions can be accessed
3. The Manchester 2017 attack also highlighted further challenges, including highly variable access to specialist trauma-focussed interventions across different geographical regions, particularly for children and young people
4. Local and national agencies should work to resolve these issues by:
 - a. integrating care pathways for psychosocial and mental healthcare for adults and children into all advance planning for mass casualty incidents
 - b. identifying funding streams in advance, to enable a rapid response from mental health services

- c. creating mechanisms to provide a centralised register of those affected, and revisiting information-sharing agreements across agencies, so that people in need of support can be identified as quickly as possible.

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