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COVID-19 and the Blitz compared: mental health outcomes in the UK

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The Blitz narrative of resilience stands in contrast to the mental health risks identified as consequences of the COVID-19 pandemic. Although evidence from then-classified studies of World War 2 showed that most people managed the stress of bombing, those vulnerable and exposed to substantial trauma had lasting or severe mental illness. Studies of different towns and occupational groups identified the proportion of people killed and wounded, the percentage of housing destroyed, and the loss of paid employment as risk factors for psychological breakdown. Mothers and children suffered not only with evacuation, but also from the trauma of bombing and damage to schools. A general association between civilian physical and psychological casualties suggests that population groups with high rates of infection and mortality might be susceptible to mental illness as a result of the pandemic. Lockdown and distancing measures contrast with the wartime sense of belonging and shared identity, reinforced by community networks and social activities.

Introduction

Because of its threat to the civilian population, the Blitz has become a reference during the COVID-19 pandemic, cited by politicians and by the media.¹ The number of deaths due to SARS-CoV-2 in the UK has already far exceeded that of the 60 595 (0·15% of the UK population at the time) civilians killed in World War 2, although it currently represents the same percentage of the population.² Unemployment, which stood at 5·1% in December, 2020, is predicted to reach 6·5% by the end of 2021, and the increase in national debt is likely to exceed 100% of the UK's gross domestic product by the same time.³ These predictions, combined with the restrictions introduced to control the spread of SARS-CoV-2, have led the British Medical Association to alert the UK Government that “the consequences of the COVID-19 pandemic on mental health could be considerable”.⁴ Their report concluded that the loss of jobs and enforced social isolation were likely to “widen existing inequalities in our society if sufficient attention is not given to the specific vulnerabilities of certain groups and demographics”.⁴ Furthermore, studies done across a range of nations between March and May, 2020, identified an association between COVID-19 and psychological stress,^{5,6} substantial distress,⁷ and symptoms of depression and anxiety.^{8,9} In an earlier Historical Review, comparing people's behaviour during the Blitz with that during the pandemic, I found that the Government's fears of an inherent vulnerability and of a so-called deep shelter mentality were not fulfilled.¹⁰ Although civilians did not undergo the selection and training that soldiers did, they proved to be more adaptable and resourceful than predicted. The present Historical Review explores the incidence of psychological casualties from air raids to identify risk and protective factors for mental illness. Because official propaganda promoted London as a symbol of resilience and because postwar politicians fostered a Blitz narrative of a nation untouched by post-traumatic illness,¹¹ this Historical Review draws evidence from then-classified research

commissioned by the UK Government during the conflict. These studies investigated the psychological effects of bombing on different types of towns and cities to identify causal factors, but were not published at the time because they contained information that could be valuable to the enemy. Wartime findings, together with recent scholarship, are compared with mortality and infection data from the current pandemic to inform policy makers about probable patterns of mental illness as a result of COVID-19.

Mental illness and the Blitz

In its prewar planning, the UK Government estimated that 1·2 million civilians would be injured during a 60 day bombing campaign.¹² In the same way that wards in National Health Service hospitals were cleared to accommodate patients admitted for COVID-19, the Ministry of Health reallocated resources in September, 1939. Patients from five psychiatric hospitals in urban areas were transferred by ambulance trains to rural locations, and wards in other asylums were cleared to free 36 000 beds for air-raid injuries.¹³ Once the bombing began in September, 1940, the increase in mental illness and fears of a so-called deep-shelter mentality were found to have been overestimated.¹⁰ In February, 1941, after 5 months of heavy raids, the Ministry of Health calculated that only 5% of air-raid admissions were for so-called nervous shock, and that most affected individuals recovered within 2 weeks.¹⁴ In the aftermath of the Blitz, Felix Brown, a psychiatrist at Guy's Hospital, observed that “psychoneuroses, induced by air raids in patients who have previously shown no psychoneurotic traits, are comparatively rare” and that “a particularly horrible experience” was needed to cause a breakdown in someone with no history of mental illness.¹⁵ A survey of clinicians treating air-raid injuries, in March, 1941, concluded that “fewer cases of neurosis” than expected had arisen, so that “the preparations made by mental hospitals and clinics for dealing with an influx of patients have not been needed”.¹⁶

However, the social research organisation, Mass-Observation, commissioned by the UK Government to survey morale in heavily bombed towns, drew a different conclusion about the incidence of mental illness. Their report, delivered in December, 1940, identified “depressive and defeatist feelings, which at present exist only in embryo[nic state]”.¹⁷ Although resilience was reported by Mass-Observation staff immediately after a heavy raid on Southampton, it gave way to dysthymia once the extent of the damage and casualties became apparent. Particularly troubling was the evidence of “open signs of hysteria, terror and neurosis” in Coventry when the city was bombed. Suspicious of these findings, the Ministry of Home Security regarded them as “defeatist and mischievous gossip” by “the intelligentsia”, and the reports were withdrawn from circulation to ministers.¹⁸

Aware of the need for accurate data, the Government authorised a study of the “psychological effects of bombing” and their “lasting influence on production” in September, 1941.¹⁹ Undertaken by the Research and Experiments Department of the Ministry of Home Security, the investigation was led by John D Bernal and Solly Zuckerman and it focused on Birmingham, a thriving industrial conurbation fed by the rising demand for munitions, and on Hull, a fishing port going through economic deprivation. Bernal, a physicist, and Zuckerman, a physiologist, turned to Aubrey Lewis, a senior psychiatrist at Maudsley Hospital, London, UK, for advice on how to conduct the investigation of psychological casualties. Lewis suggested that Russell Fraser, a New Zealand physician who had trained at the Maudsley, did the psychiatric assessments.²⁰ The clinical study focused on Hull, where a sample of 900 adults, largely dock workers and their families, was convened from various locations in the port city. However, the primary purpose of the research was not to inform the provision of mental health services for the UK population, but to calculate the density of attack considered likely to break the morale of German industrial towns and halt their production.²¹ Zuckerman, who believed that “enquiries into neuroses breed neuroses”, framed the investigation in behavioural terms to avoid a focus on psychological symptoms.²² Fraser sought to modify the study design but was met with intransigence from Bernal and Zuckerman.

Although Bernal and Zuckerman’s secret report delivered, in April, 1942, an account of resilience, 4% of men and 14% of women were assessed as having “severe neuroses” 6 months after the raids.²³ Despite this clinical finding, Bernal and Zuckerman concluded that psychiatric treatment for air-raid victims could do “more harm than good”.²³ If symptoms were the primary outcome measure, the findings would have been less optimistic because the case notes showed evidence of enduring distress and anxiety. Troubled by the official report, Fraser published his team’s results in a different format.²⁴ Focusing on 94 adults treated at a first-aid post

without a physical injury, they found that a “severe personal bombing experience”, rather than pre-existing mental illness or vulnerability, was the primary reason for attendance.²⁴ Of these cases, 56 (60%) people were diagnosed with anxiety and depressive state, 17 (18%) with depression, and 14 (11%) with anxiety. At the 10 month follow-up, 29 people (31%) continued to have psychological symptoms, and 32 (34%) people had recovered in the interim. In contrast to Bernal and Zuckerman, Fraser concluded that “clearly the individual may be helped by the doctor or social agencies: apart from any other treatment, they may reduce these strains, promote an environment and attitude suitable for recovery”.²⁴

In terms of causality, Bernal and Zuckerman found that post-traumatic illness was primarily a function of physical casualties and of the destruction of homes. Between March and November, 1941, a series of heavy raids killed 1104 inhabitants of Hull (0.4% of its prewar population).²⁵ Almost half of the port city’s housing stock had been destroyed: for every person that died, 35 people lost their homes.²¹ The sudden shock of being made homeless had been found from the London Blitz to be an important risk factor for mental illness, particularly when compounded by the recruitment of family members to the armed forces.²⁶ Bernal and Zuckerman contrasted the “torpid and apathetic” mood of Hull with “an inner buoyancy” found in Birmingham.²⁷ They identified the availability of well paid jobs in munitions and affordable housing in the conurbation as the key variables. However, their conclusion underplayed the fact that 10000 people left Birmingham every month as a result of raids, and that mortality in Birmingham (0.2%) was half of that in Hull.

The fact that raids targeted cities, industrial centres, and ports contributed to a growing belief that the poorer sections of urban society were suffering disproportionately. By March, 1942, the Home Intelligence Division had gathered evidence that ordinary people increasingly believed that “everything is not fair and equal and that therefore our sacrifices are not worthwhile”.²⁸ Further studies would show that the loss of confidence in defensive measures and the emergency services had had an adverse effect on morale.

Concerned that employees in heavily raided areas were absenting themselves from workplaces despite “attempts at compulsion”, the Government commissioned a more detailed study from the Research and Experiments Department in February, 1943.²⁹ Led by Clifford W E Emmens, a physiologist, the investigation compared Norwich, Exeter, York, and Canterbury (historic cities hit during the Baedeker raids) with Bootle, Clydebank, and Greenock (three industrial centres). The team did a social survey, researched reports of morale in local newspapers, rates of absenteeism, the percentage of houses destroyed, density of the attacks, and casualty rates.³⁰ During 2 days in March, 1941, Clydebank, an industrial district of

	Casualties			Density of attack (tons of bombs per square mile)	Buildings destroyed,%	Minimum number of days before schools reopened	Absence from work (average number of days per worker)
	Killed	Wounded	Per 1000 population				
Clydebank	528	617	27.3	60.2	27.0	120	6.5
Greenock	297	289	8.3	14.9	7.0	13	3.0
Bootle	262	261	9.6	38.0	11.0	22	2.8
Exeter	262	189	8.0	18.2	9.8	21	1.1
Canterbury	48	57	5.0	16.5	5.0	Not recorded	1.3
Norwich	223	254	4.5	13.3	4.6	0	1.1
York	76	93	1.8	8.2	0.7	0	0.4

Data from Emmens.³⁰

Table: The effect of air raids on seven UK towns between March, 1941, and May, 1942

western Glasgow, was under intense bombing, resulting in 1145 people being killed or wounded (2.7% of its population at the time). C W E Emmens and his team found that Clydebank had the highest percentage of destroyed buildings (27%), and schools remained closed for 120 days after the raids (table).³⁰ Across the seven towns, the highest rate of absenteeism after the raids—partly a proxy for acute stress reaction—was 17 days. Absence from work in the context of available employment correlated with three variables: physical casualties, destruction of housing, and the density of the attacks. However, in Greenock, a centre for shipbuilding, absenteeism was twice as high as predicted by the data series. “The general depression” in the town was explained by low morale before the raids and poorly organised emergency services.³⁰ On the basis of the findings from all seven towns, Emmens concluded that “the effective density of the attack” combined with the casualties per thousand and the percentage of houses destroyed exercised a significant, though not an absolute detrimental effect on resilience.³¹

The finding that the intensity of the bombing affected mental health outcomes informed the strategic bombing of Germany by the Allies. About 350 000 German civilians (0.4% of the prewar population) are estimated to have been killed, substantially more than the number of deaths in the UK.²³ Operation Gomorrah (four heavy raids directed at Hamburg in July and August, 1943) created a firestorm with a cumulative death toll of 37 000 and destroyed 61% of the housing stock. In Hamburg’s central district, 5.9% of the inhabitants were killed; in the crowded working-class quarter of Hammerbrook, mortality rose to 36%, including 7000 children and adolescents.³² The horrific trauma of Hamburg caused apprehension in other towns, especially in Berlin, where an immediate, partial evacuation was ordered. Fear of defeat began to be outweighed by fear of continued conflict.³³ Whereas Hamburg, Germany’s second main city, was of industrial importance, the bombing of Dresden in February, 1945, was largely

motivated by its psychological impact and resulted in the death of 25 000 people, 3.3% of the inhabitants and refugees living there at the time.³⁴

In May, 1941, Lewis was asked by the Medical Research Council to establish the incidence of psychological disorders in the UK to counter US politicians and scientists who believed that the British were understating the rate for propaganda purposes.³⁵ Data collected in London and Bristol, together with reports from medical observers, led Lewis to identify a “slight rise” in psychological illness in areas subjected to intensive raids.³⁶ However, Lewis acknowledged problems with the measurement of civilian mental health. The traumatised air-raid casualty was often “not seen in the psychiatric department, but in the medical or specialist division with which their presenting symptom would appear to be concerned”.³⁷ Because of under-reporting and the popular prejudice that mental illness was a form of defeatism, Lewis concluded that the full extent of war-related stress might not be detected until the return of peace. In Scotland, Erwin Stengel observed that “air-raid phobia” was not as “rare as their absence in psychiatric literature would suggest” and predicted that flying bombs would increase their frequency.³⁸

The V1 and V2 missile attacks on the UK, a second wave of bombing that started when people believed that air raids had ended, broke the resolve of some vulnerable groups.³⁹ In July, 1944, after 2 weeks of flying bombs, the Ministry of Home Security found that “strain, weariness, fear and despondency are widely reported, particularly among women and children, those whose husbands are away, and the old and middle aged”. Sleepless nights were said to account for much of the increased restlessness.⁴⁰ The authorities were sufficiently concerned to divert anti-aircraft batteries and fighter squadrons to shoot down the flying bombs and open underground shelters, giving wide publicity to the measures taken to protect the public.⁴¹ Importantly, the Government did not commission any studies of mental illness to assess the cumulative effect of bombing after the war.

Strategic (terror) bombing

The case notes collected by Fraser in Hull showed that bombing not only terrified people but led to substantial trauma for those who had lost their homes and family members. Some vomited at the sound of warning sirens; others trembled during raids or lost control of their bodily functions.²³ Anxiety, depression, headache, dizziness, body pains, fatigue, and nightmares were commonly reported. A retrospective study of the medical notes of 50 randomly selected civilians and 54 emergency responders with a war pension for a post-traumatic illness found that their symptoms endured into the postwar years.⁴² Important qualitative differences exist between the trauma experienced by people during the Blitz and those suffering loss from the pandemic. Air raids had a malevolent quality, created by the knowledge that these were not random acts but the intentional killing of people and the targeted destruction of their homes and livelihoods. An Associated Press Report of the Allied raid on Dresden described it as “deliberate terror bombing”.⁴³ Ruined urban landscapes served as reminders of the harm caused. Although the wearing of masks in public offers a visual representation of COVID-19 and news reports include film of the severely ill being treated in intensive care units, the sense of targeted violence is absent. However, people exposed to bombing had social networks and communal activities that created a sense of belonging and shared identity. Firemen, who had been denigrated as so-called army dodgers before the raids, became heroic figures on par with fighter pilots once the bombs fell. People went to fire stations to thank them for their work, akin to the public clapping National Health Service staff during the pandemic.⁴⁴ Yet successive lockdowns and distancing measures have denied these protective factors to many exposed to risk or who have lost close friends and relatives to COVID-19. The distress of not being able to visit dying relatives or attend their funerals might increase the risk of mental illness.

Relationship between physical and psychological casualties

Studies of soldiers done after World War 2 established that a constant relationship exists between physical (killed and wounded) and psychological casualties,⁴⁵ a finding that has been replicated in different cultures and conflicts.^{46,47} The studies of air raids by Fraser and Emmens showed that the association found in soldiers was replicated in civilians. Therefore, the incidence of severe cases and mortality from COVID-19 might serve as a guide to the increased risk of mental illness, whether by occupation or area of residence. This association does not mean that civilian casualty rates from World War 2 can predict levels of mental illness associated with the pandemic, but that there might be a general relationship common to both traumatic events. A systematic review of patients treated in hospital with severe acute respiratory syndrome or Middle East respiratory syndrome found that, although

most people recovered without experiencing mental illness, an association between the respiratory syndrome and depression, anxiety, fatigue, and post-traumatic stress disorder in the post-illness stage existed.⁴⁸

In the military, the relationship between physical and psychological casualties is mediated by variables such as confidence in leaders and training.⁴⁹ In December, 1940, a survey done by Mass-Observation halfway through the London Blitz found that physical health, the opportunity to work, and having friends were three of the top four factors identified by civilians as supportive of morale.⁵⁰ Studies done later in the war found that quality of housing, social support, and availability of employment mediated psychological casualties, variables that might influence the incidence of mental illness in the aftermath of the current pandemic.

COVID-19 mortality in England and Wales

Data for the period of March 1 to July 31, 2020, analysed by the Office of National Statistics,⁵¹ showed that London had the greatest number of deaths caused by COVID-19. This number was a function of the city’s size and density; major urban conurbations in England and Wales had the highest age-standardised mortality rates over the same 5 month period. Areas of greatest deprivation (assessed by income, employment, education, health, crime, and access to housing) in England had mortality rates of 3.1 deaths per 100 000 people, more than twice the rates in the least deprived areas (1.4 deaths per 100 000). A report by Public Health England confirmed the association between deprivation and mortality, but also found that, compared with the White ethnic population, this association was 10–50% higher in Black, Asian, and minority ethnic groups,⁵² who had an increased risk of infection because they are more likely to live in urban districts, crowded households, deprived areas, to have lower incomes, and to have jobs that expose them to a higher risk.⁵³ Occupations at increased risk included security guards, bus and coach drivers, and women working in social care. By August, 2020, 10 841 COVID-19 cases had been diagnosed in nurses, midwives, and nursing associates, representing 1.9% of professionals on the Nursing and Midwifery Council Register. A self-report survey of 709 intensive care staff found that 45% met the threshold of probable clinical significance for common mental illnesses.⁵⁴

Mental illness and COVID-19

Although mortality and hospital admission can serve as a guide to occupations and areas of residence with a higher risk of mental illness, these variables do not tell the full story. Lockdown and measures to enforce physical distancing have been shown to have an adverse effect on wellbeing. A review of 24 periods of quarantines in ten different countries identified a range of negative effects, including post-traumatic stress symptoms, confusion, and anger.⁵⁵ In Germany, where the number

Panel: Risk factors for mental illness

Aerial bombing

- Mortality (60 595 civilians, or 0.15% of the prewar population)⁶³ and wounding
- Bombing of homes leading to overcrowding, homelessness, and poor-quality housing
- Targeted air raids on industrial and commercial premises leading to loss of businesses and need to seek alternative employment
- Temporary closure of schools because of damage to buildings or evacuation
- Diversion of college buildings to other uses such as hospitals, military training, and government offices

COVID-19

- Mortality (124 025 or 0.15% of the population)⁶⁴ and severe infection
- Social isolation as a result of lockdown and distancing measures
- Loss of livelihoods due to restrictions on trading and movement of customers and goods to inhibit transmission of virus
- Temporary closure of schools to restrict social interaction
- Closure of university campuses to restrict social interaction

of deaths from COVID-19 is lower in total (71285) and as a percentage of the population (0.09%) than in the UK, a similar mental health effect has been identified. A cross-sectional study of 15 000 adults between March and May, 2020, identified an increase in symptoms of depression, anxiety, and psychological distress.⁵⁶ High trust in the government's ability to manage the pandemic and feeling well informed about COVID-19 were associated with a low burden on mental health.

A quota sample of UK adults surveyed in the first week of the lockdown found a modest increase in self-reported anxiety and depression associated with loss of income, children living at home, and pre-existing health conditions.⁵⁷ Done in April, 2020, a national cohort study of UK households found an overall increase in mental distress as measured by the Short General Health Questionnaire.⁵⁸ Those with pre-existing health inequalities and low incomes were disproportionately represented, whereas women, people living with young children, people aged 18–24 years, and people aged 25–34 years were substantially affected. An online survey done in June and July, 2020, of 12 989 people in Wales reported so-called severe psychological distress in 17.0% of men and 20.9% of women,⁵⁹ findings that were particularly associated with young people, women, and those in deprived areas. Data collected by the Office of National Statistics⁶⁰ during April and May, 2020, showed that loneliness was associated with a high frequency of feelings of anxiety, which were more prevalent in women than in men, adults with a disability, and those

older than 75 years. Furthermore, a population study of 3281 adults older than 50 years, which compared findings with longitudinal data collected between 2015 and 2019, identified loneliness and decreased physical activity as significant causes of increased rates of depression.⁶¹ University students living away from home for the first time and overseas students newly arrived to the UK, confined to halls of residence where they have few, if any, established social networks, might be at particular risk of mental illness.⁶² Lockdown and physical distancing contrast with the communal activity encouraged during the Blitz to protect against mental illness (panel). At that time, people gathered in pubs, theatres, and dance halls despite the dangers of being in a confined space,⁶⁵ and cinema attendance grew throughout the war.⁶⁶

Wars are generally thought to result in a short-term fall in suicide rates as a collective sense of purpose imparts a feeling of belonging and of shared adversity, at least until the hostilities cease.⁶⁷ Although some nations have reported no change or a fall in suicide rates during the initial phase of the pandemic, these might increase once the initial crisis has passed and rising unemployment, intimate partner violence, and worsening mental health increase the risk of self-harm.⁶⁸

Lockdown, air raids, and help seeking

A study of referrals to community mental health teams in Cambridgeshire and Peterborough during the first lockdown identified a system-wide reduction in the use of these services.⁶⁹ Although this decrease reflected a switch from face-to-face contact to online consultations, it also represented a reduction in requests for care. Whether this change was a consequence of a reduced need or of diminished help seeking was unclear. In April, 2020, the incidence of presentations in primary care facilities in England fell by 43.0% for depression and by 47.8% for anxiety disorders.⁷⁰ The reductions were greatest for adults of working age and for patients registered in the most deprived areas. However, by September, 2020, the rates had returned to the expected values. A similar occurrence had been reported in April, 1941, towards the end of the Blitz. Tom Harrison⁷¹ reported that people in heavily bombed areas often did not seek help, but “have simply taken to bed and stayed in bed for weeks at a time”. His observations were challenged by two psychiatrists who suggested that these were cases of stupor caused by blast concussion.^{72,73} Harrison responded, “no one who has spent any time objectively studying the ‘blitztowns’ and getting right in among the mass of the people could shut their eyes...to the very considerable effect that continuous raiding has on people’s nervous system”.⁷⁴ A survey of 100 adults in two Bristol streets hit by bombs found that most people reported somatic symptoms of distress but were “too ashamed... to consult a doctor”, taking refuge in tonics and “absence from work, often to the extent of some weeks, on the grounds that they feel too tired”.⁷⁵

Both Lewis³⁷ and Carlos P Blacker,⁷⁶ London-based psychiatrists, believed that stigma and the British culture of repressing feelings of upset, anger, or hurt, the so-called stiff upper lip, impeded the reporting of mental illness. Clinicians were also wary that research on bombed towns that showed substantially increased rates of depression and anxiety could attract accusations of defeatism from government sources.

Effects of lockdown on the mental health of children

Closure of schools, restrictions on social activities, and parental worries caused by the pandemic have been shown to increase the mental health risks for children, and these can disproportionately affect those already disadvantaged or marginalised.⁷⁷ In July, 2020, the Academy of Medical Sciences⁷⁸ reported data from convenience samples that indicated a substantial increase in behavioural problems among primary school-aged children (usually defined as 5–10 years old), with high levels of anxiety across all age groups. During World War 2, the psychological effect of air raids on children was overshadowed by the attention given to a programme of mass evacuation designed to protect them from death, wounding, and the frightening sights and sounds of bombing.^{79,80} At first, predictions of their psychological vulnerability to air raids appeared to be misplaced because preliminary findings from Child Guidance Clinics in London showed that referrals had not increased from prewar numbers, despite some children having returned to the city.⁸¹ However, a study of a representative sample of 8000 children in Bristol, in 1941, found that psychological symptoms after heavy raids were prevalent in those aged 5–7 years and that psychosomatic illnesses were prominent in children aged 11–14 years.⁸² The incidence of children showing so-called signs of strain was 4%, although this rate was considered an underestimation because the data had been collected by teachers who were not trained to detect symptoms.⁷⁵ Frank Bodman,⁸³ director of the Bristol Child Guidance Clinic, found evidence of behavioural disturbances, with a 47% increase in referrals from juvenile courts compared with the preconflict period. Mental illness was found in children who had been evacuated from a Bristol hospital during a night raid; 61% showed signs of strain from 3 weeks to 2 months afterwards, and 11% had symptoms at 7 months.⁸⁴ Therefore, by 1943, a picture of children who lived in heavily bombed areas with chronic anxiety symptoms had begun to emerge.⁸⁵

In the postconflict period, a study by Charlotte Carey-Trefzer⁸⁶ followed up 212 children who had presented to the Great Ormond Street Hospital's Child Guidance Clinic between 1942 and 1946, "in which the war was mentioned in connection with the child's distress". The greatest number of referrals were the result of air raids (117 [55%]), although housing problems (32 [15%]) and loss of schooling (20 [9%]) were arguably

collateral effects. At follow-up, only 21% of children had recovered, although 47% were assessed as having improved. The severity of a child's reaction to bombing was judged to be influenced by their parents' response to the trauma, which could either accentuate or calm their anxiety. Research done with German schoolchildren in July, 1945, identified fatigue, social withdrawal, and poor concentration leading to declining educational attainment.⁸⁷

Civilian mental health: policy and practice

In 1943, to assess the demand for mental health services after the war, the Ministry of Health commissioned Blacker⁷⁶ to survey psychiatric outpatient clinics in England and Wales. He found that 65 [58%] of the 113 clinical directors believed that a so-called latent neurosis existed in the civilian population and that it was likely to emerge in the postwar period. Of these 65 directors, those based in large towns (34 [52%]) were more likely to support the prediction than those in small towns (20 [31%]), and only 11 (17%) of those in London took this view. Clinicians in the capital might have been influenced by a sustained campaign of film and posters to establish London as a symbol of resilience.⁸⁸ In August, 1943, Joseph Goebbels, the German Minister of Propaganda, acknowledged the British Government's success in praising stoical determination during the Blitz and making "a legend of London" to counter feelings of despair.³² In the expectation of an increased demand for treatment, Blacker urged reforms to address severe shortages of staff, replace 19th century buildings, and develop community services. Despite his recommendations, the Government's white paper on the creation of the National Health Service⁸⁹ identified difficulties over the inclusion of psychiatric hospitals, and the chief medical officer's report, in 1946, which looked forward to the new institution, made no mention of psychiatry. The Board of Control, which governed the asylum system, abandoned its objections only when its continued authority was protected.⁹⁰

Although the bill presented to Parliament included psychiatric hospitals within the National Health Service,⁹¹ the myth of the Blitz facilitated the sidelining of psychiatry.⁹² Official histories promoted the idea that the nation's mental health had improved during the war, attributed to a sense of common purpose and a national will to work.^{12,63} No follow-up studies of traumatised air-raid casualties were done; the classic study by Irving Janis,⁹³ in 1951, concluded that "neither organic neurologic diseases nor psychiatric disorders can be attributed to nor are they conditioned by the air attacks". However, war pension data testified to enduring symptoms. In 1947, 48000 civilians and emergency responders were receiving pensions for physical and psychological wounds,⁹⁴ of which 24000 remained in payment in 1956.⁹⁵ A postwar survey of German civilians found that

Search strategy and selection criteria

I searched The National Archives catalogue for the period of 1938 to 1945, and Web of Science with the terms “morale”, “resilience”, “depression”, “air-raid neurosis”, and “mental illness” on Dec 27, 2020, applying no language or date restrictions. The search of The National Archives was focused on four departments of government: the Ministry of Health, the Ministry of Information, the Ministry of Home Security, and the Air Ministry.

91% identified bombing as the most traumatic experience of the war and more than 33% said it had broken their morale.⁹⁶

After World War 2 ended, the initiatives proposed during the conflict to address post-traumatic illness were abandoned, primarily because of absence of funding but also because of a fractured management structure.⁹⁷ Reform of training and the wider provision of outpatient facilities were delayed, reflecting a policy of austerity but also a consequence of psychiatry’s low standing in the National Health Service hierarchy. During the current pandemic, the Scientific Advisory Group for Emergencies⁹⁸ briefed the UK Government on the probable increase in mental illness and the disproportionate effect on minority ethnic groups and those in high-risk occupations. In May, 2020, the Scientific Advisory Group for Emergencies sought to balance the mental health benefits from the creation of so-called bubbles, or household connections, against an increased risk of spreading the virus, and recommended a phased introduction accompanied by epidemiological monitoring.⁹⁹ Public Health England,¹⁰⁰ the executive agency of the Department of Health and Social Care, provided regular updates on the mental health and wellbeing of the population. If the postwar experience is repeated, then once the UK is protected against COVID-19 and the focus switches to economic and educational priorities, mental health might find itself marginalised once again.

Conclusion

The myth of the Blitz—a nation untroubled by the trauma of aerial bombardment—had a positive utility in 1940–41, when the UK faced the threat of invasion;¹⁰¹ it fostered resolve and encouraged support from the USA.¹⁰² However, once the UK’s security was established, the value of the narrative eroded, and it deterred those with post-traumatic illnesses from seeking help. Adopted by politicians, in 1945, to create the idea of a new nation forged by conflict, the myth undermined the claims of psychiatry within the National Health Service.

Deaths as a result of both aerial bombing and COVID-19 occurred disproportionately in areas of socioeconomic deprivation and highlighted existing health inequalities.

Although most civilians coped with wartime stress, people in heavily bombed towns or in high-risk occupations were often affected by severe or enduring mental illness. Although differences in the nature of the trauma suggest caution in drawing parallels, the most substantial mental health outcomes from the pandemic will probably arise in locations that had high mortality and hospitalisation rates or in people with high-risk occupations. Ironically, children who survived the Blitz are now among those at greatest risk of the severe physical and psychological effects of COVID-19.

Declaration of interests

I declare no competing interests.

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