Centre for
Mental Health

Covid-19 and the nation's mental health
Forecasting needs and risks in the UK: October 2020

Nick O'Shea

Summary

- Centre for Mental Health has worked with NHS colleagues to build a model based on the best available evidence to forecast how many people may need mental health support as a result of the Covid-19 pandemic.

- Nationally, in England, the model predicts that up to 10 million people (almost 20% of the population) will need either new or additional mental health support as a direct consequence of the crisis. 1.5 million of those will be children and young people under 18.

- About two-thirds of people who will need support already have existing mental health needs, including severe mental illness.

- The majority of people will need support for depression or anxiety, or both. Others will need help for trauma symptoms and a range of other difficulties, including complicated grief arising from bereavement and loss.

- As further evidence becomes available, the figures may rise: for example when the extent of the unequal effects of the pandemic on Black and minority ethnic communities, on care homes and disabled people becomes clear.

- Further waves of the virus, and its consequences, will exacerbate the effects on mental health and the numbers of people needing support.

- The Government and the NHS can and must take steps now to prepare for this additional need among people of all ages. Mental health problems cannot be ignored. A proactive, timely, compassionate and effective response will help people experiencing mental health difficulties before they reach crisis point.

Introduction

The Covid-19 pandemic has created economic, health and social uncertainty and insecurity. The impact on our mental health and corresponding need for mental health services is unknown and difficult to forecast. The two main reasons are:

• The duration of the pandemic is a significant determinant of health impact. The longer the pandemic, the greater the impact. We do not know how long the pandemic will last.

• We have not experienced a global pandemic since 1918, restricting the experience on which to draw. There is a corresponding absence of raw data on which to base statistical models.

Despite the challenges, it is important to try to anticipate the mental health impacts of such a significant event in our lives in order to be prepared to prevent problems wherever possible and meet needs whenever necessary.

Centre for Mental Health has published two previous briefings drawing on international research and emerging evidence to forecast the mental health implications of Covid-19 (here and here). They identify the likely impacts on population mental health and groups of people who are especially at risk of experiencing poor mental health as a consequence of the virus and its wider economic, social and personal impacts.
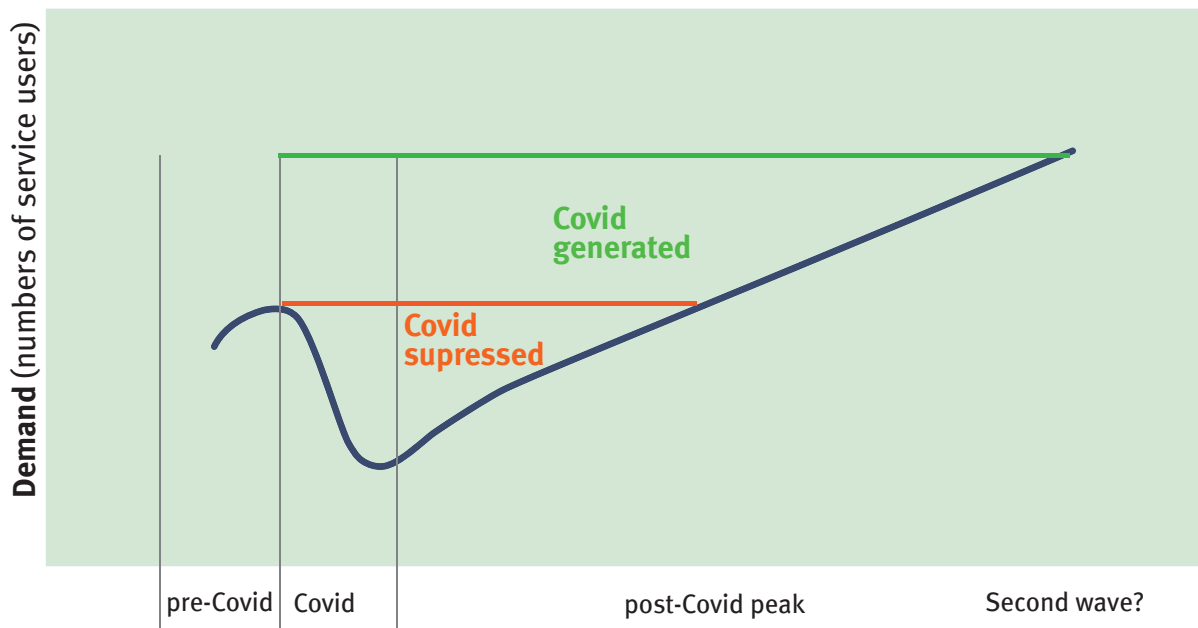
The forecasting model for mental health need arising from Covid-19 has been developed by physicians, researchers and economists from NHS England, NHS trusts and Centre for Mental Health. Following a comprehensive review of available research, robust estimates for the impact of Covid-19 on different groups have been collected and translated into a model which projects need and resulting demand for services. The full model, and accompanying information about how it was developed, can be accessed here.

The primary purpose of the model is to support local organisations to predict levels of need for mental health support among children and adults in their communities. The model provides a framework for local authorities, clinical commissioning groups, integrated care systems and other local planners to input their local data and estimate as accurately as possible the levels of need for mental health support in their areas.

Whilst some gaps in the research remain, there are enough findings to give a national estimate for which health providers and organisations can prepare. Time is of the essence and the following numbers are the best that Centre for Mental Health can provide to enable national decision-makers to ensure resources are made available to meet the growing levels of need we are forecasting.

Visual explanation of the model: forecasting future demand

Adapted from graph created by Paul Bibby, Head of Strategy and Planning, Lancashire and South Cumbria NHS Foundation Trust

Covid generated

Covid supressed

Demand (numbers of service users)

pre-Covid | Covid | post-Covid peak | Second wave?

Model is broadly applicable to all areas but will vary in impact by service line

Covid-supressed

People known to services who have currently ceased/ postpone their engagement with these services. It is assumed these will return to services over time, however, their mental health could be changed from pre-Covid state.

Covid-generated

People not yet known to services, whose experiences of Covid, both direct and indirect, have caused them to develop a degree of mental illness.

Covid-altered interventions

Service users in this group have remained in contact with services, but have received a changed intervention, i.e. telephone and/or video call. For some, this will result in a change in their mental health.

National forecast for adults

The numbers are stark. Based on the available evidence to date, we are able to forecast a significant rise in poor mental health arising from the pandemic of up to 8.5 million adults.

This figure is reached even with the assumption that only 1 in 3 people who have a clinical need will receive a service. This is based on national data for how need translates into service use from the 2014 Adult Psychiatric Morbidity Survey (McManus *et al.*, 2016).

General population: Among people who have not experienced mental ill health prior to the pandemic, demand for services is forecast at 1.33 million people for moderate-severe anxiety and 1.82 million for moderate to severe depression. This figure is based on research on the impact of enforced isolation due to Covid-19 (Fancourt *et al.*, 2020).

Comorbidity: When designing the model, practitioners asked for each diagnosis to be listed separately, even if someone may experience more than one illness (comorbidity). Whilst this may lead to double counting, there are four reasons for taking this approach:

- The literature on comorbidity isn't robust and few of the studies have looked at comorbidity

- We cannot reliably assume that comorbidity rates will be the same as pre-Covid times

- There is no standard rule on where to discount comorbidity from (for example, rates for people with depression who also have anxiety and vice-versa)

- People with comorbid conditions may require input from two different parts of mental health services (for example someone may need a specific post-traumatic stress disorder therapy and a specific anxiety therapy).

Specific population groups

In considering the groups listed below, the model creates a discount factor to prevent double-counting. In each case, the denominator figure (the number of people in each group) is subtracted from the general population size. There remains potential for double-counting within other population groups, but because the group sizes are generally small, the numerical impact is correspondingly limited.

Existing mental health conditions: Those with existing mental health conditions are estimated to number 7.5m people (McManus. *et al.*, 2016; ONS, 2020). Of this number, those who will require additional services and support as a result of Covid-19's impact are 2.5 million for anxiety and 2.6 million for depression (both moderate and severe).

NHS workers: Over 200,000 NHS workers may need treatment for: post-traumatic distress (36,996), high psychological distress (120,372) and burnout (81,499). While less data has been collected, it is likely that a similar pattern will affect those working in social care settings, such as nursing homes, and these will be included in future forecasts once reliable research is published. Other groups of key workers facing high-risk situations during the pandemic, for example in voluntary and community organisations, public transport and retail, will also be at risk of poor mental health but are currently poorly researched.

Intensive Care Unit (ICU) patients: For those recovering from severe Covid-19 – where they were admitted to ICU and survived (of which there are currently 6,150 people in England) – we estimate that 630 will need mental health support for anxiety, 454 for depression and 354 for post-traumatic stress disorder (PTSD).

Families: Smaller proportions of their family members will also suffer from similar issues, with 791 requiring clinical help and support for PTSD, 441 for anxiety and 136 for depression.

Bereaved: For those who are bereaved, having been unable to say goodbye to loved ones or be with them in their last moments, support for depression, anxiety and PTSD is expected to be needed for over 36,000 people, with depression being the biggest factor, forecast for 16,049 people in England.

Unemployment: Finally, recessions are bad for mental health and it is likely that we are entering a severe recession with unemployment expected to surge. Based on the increased levels of people claiming out of work benefits (1.448 million additional people between March and July), the demand for services generated is just under 29,684 for major depression.

Given the number of people in this population group, the increased demand for services is comparatively slight. There are two reasons. First, the research (Economou *et al.*, 2013) suggests these prevalence rates. Second, the full economic toll is yet to be revealed. Two to three million people could be added to the current numbers of out-of-work benefit recipients (OECD, 2020).

Total impact

The cumulative impact is an expected 8.58 million adults in England requiring mental health support for a range of problems including PTSD, depression and anxiety. This is 20% (19.99%) of the adult population in England and represents a large increase in the service provision that will be required.

The figures are expected to be adjusted upwards in future forecasts as the model accounts for increases observed in Black, Asian and minority ethnic communities, people in nursing homes who have experienced Covid-19 outbreaks, and those with learning disabilities.

At what point that new level of demand emerges will vary over time, with anxiety and depression increasing demand over the next year, and PTSD more likely to follow later.

In terms of service response, the aim of this model is to project the numbers of people who will need support and care, rather than recommending what kind of services are required. Whilst existing services such as Improving Access to Psychological Therapies (IAPT) may help with some diagnoses, much of this demand is novel: the collective trauma of NHS front-line staff working in Covid-19 wards, for example. New responses will be needed to tackle these new problems. By offering local areas a clear picture of the levels of demand and the types of needs that will emerge, our model offers the foundation for commissioners and clinicians to develop the responses required.

National forecast for children and young people

Robust research on the impact of pandemics on children and young people covers fewer areas of the population which makes it more difficult to produce reliable predictions. With the evidence we currently have available, we forecast that the increase in demand for services in England resulting from Covid-19 will be for 1.5 million children (1,500,320), 15% of the number of children aged 5-19.

General population: For the population aged 5-19 that has never previously received mental health support, help for depression will be needed for 405,992 children and a further 116,593 will need support for PTSD.

Specific population groups

As with the model for adult demand, the discount factor is applied to the general population numbers to avoid double-counting. Comorbidity is also accounted for as per the adult model.

Experience of quarantine and social isolation: There were 3.25 million young people in this population who were aged 11-16 years and kept at home during lockdown. Depression and anxiety are the two predicted diagnoses to emerge, with 458,922 children needing help for depression, and 407,623 for anxiety. Whilst the research is robust, it should be noted that both diagnoses are forecast within ranges, rather than a specific percentage point. We have used the mid-range as an estimate.

Bereaved: The number of bereaved children is estimated at just under 10,000 (9,853). This accounts for those who sadly lost parents to Covid-19 between March and September 2020 and those whose parents died of other causes during the lockdown period, when restrictions on visits and funerals were in place. 1,121 of those children will need mental health support to help them process their grief and trauma.

ICU patients: The number of children in ICU with Covid-19 (66) was mercifully low. This forecast suggests three of them will need mental health support, but we suggest that local areas determine their figure with greater precision.

Total impact

The estimate is that 1.5 million children will need support and help for mental health problems. As with adults, this number is expected to grow as:

- More population groups are added to research
- The impact of the pandemic grows with its duration

Again, the model offers a forecast, not a template for service design. Local areas will need to use the numbers to develop their response to young people encompassing digital but also 'in person' services that will help them.

Conclusion

Meeting the mental health needs that arise from Covid-19 is a huge challenge, and one which is not optional. Just as responding to the threat of the virus itself has tested every nation's resilience and resources, so will addressing the psychological and emotional consequences. There is time to prepare, but the window is limited.

This model estimates services for England will need a combined capacity for over 10 million additional people (10.08m).

These numbers will be revised as further research becomes available, but the primary message is clear. Increased demand is going to be high and it is imperative that at a national, regional and local level, services ready themselves to respond. Just as the virus is novel, so too are some of the mental health challenges which emerge. Reacting and responding with creativity and adaptability will be key to success.

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BRIEFING

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- Further waves of the virus, and its consequences, will exacerbate the effects on mental health and the numbers of people needing support.
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