

Mental Health During COVID-19 in Bradford District: A Rapid Mental Health Needs Assessment.

May 2020

Aims:

This Mental Health needs assessment will take an iterative approach to provide support to the on-going dialogue and service development between mental well-being providers during the covid19 period.

Stage 1 – Baseline Assessment [presented below] – May 2020

To provide a rapid baseline assessment of mental health disorders in Bradford

To identify groups at particular risk of deteriorating mental well being (and the most important risk factors)

To systematically review the potential mental health impact of COVID-19 on the Bradford population, both in the short and long term

Paper 2 – Emerging Needs (survey of Mental Health Providers) – June 2020

Gather intelligence and data from mental health service providers across the system.

Use this data to support and inform a mental health outcomes framework (for the Bradford Mental Health Partnership Board).

Paper 3 – Final Report – July 2020

Based on the conclusions of Papers 1 and 2, assess how well supportive and preventative mechanisms in Bradford District (see separate Mental Health operational plan) meet the District’s mental health needs, and identify any gaps.

Introduction

We are already aware of groups across our population that are at risk of poor mental wellbeing and the development of mental health conditions, including anxiety, depression, self harm, psychosis and suicide.

In addition, we already know a range of risk factors for the development of poor mental health including unemployment, deprivation, poor physical health and substance misuse.

During the unprecedented times of the COVID pandemic and government response, mental health is likely to be significantly challenged, as some risk factors for the development of mental illness and poor wellbeing will be exacerbated- for example isolation and financial strain as well as increased levels of bereavement and traumatic experiences .

This needs assessment will rapidly review the research and intelligence to help us identify these key risk factors for development of poor mental health and wellbeing during COVID-19 and the sub populations that are most likely to be affected.

Methods

The needs assessment will be informed by:

- The existing level of poor mental wellbeing and MH disorders in Bradford district (these conditions are unlikely to improve during this time, although this will be monitored as further evidence is generated).
- Known risk factors for poor mental wellbeing in our population, and identification of which risks are likely to be exacerbated during COVID-19, in which population groups (e.g isolation, health related anxiety, bereavement, food poverty, homelessness, unemployment, alcohol and drug use).
- Known protective factors for positive wellbeing and estimation of which are likely to be impacted during COVID-19, in which population groups (e.g. sense of purpose, belonging, participation in community, physical activity, connection with people and nature).
- Emerging estimates of MH disorders arising following COVID-19 and the populations most at risk- informed by published research.
- Service level intelligence and data to indicate the capacity of providers to respond to needs.
- Evidence based interventions to promote wellbeing and prevent mental illness, with direct relevance to this context, and which can be sensibly applied.

A life course approach will be followed to enable a systematic consideration of mental health risk and need across the range of our population. This approach has been highlighted previously as there is an understanding that the determinants of mental health may accumulate in sub groups of the population and continue throughout life (Kirkwood et al, 2008). A life course model for mental health during COVID has been developed by Hertfordshire County Council and acts as a useful model (See Figure 2 in Appendix).

Caveats;

Given the rapidly evolving situation, and the need to develop guidance as quickly as possible to minimise harms associated with COVID the needs assessment is being pulled together rapidly. High quality, published, peer reviewed evidence may not be available to the same extent as would normally inform a needs assessment. Intelligence may need to be initially drawn from opinion and commentary pieces of established organisations, or more largely from local service provider feedback. We may need to make inferences from our existing knowledge base on mental health prevention and management, and use knowledge and intelligence to apply these under the current extraordinary circumstances we are in. We must therefore accept the results of this needs assessment will provide a 'best guess' that may evolve as further scientific evidence and local intelligence emerges.

Definitions

Wellbeing

A positive physical, social and mental state; it is not just the absence of pain, discomfort and incapacity. It requires that basic needs are met, that individuals have a sense of purpose, that they feel able to achieve important personal goals and participate in society. It is enhanced by conditions that include supportive personal relationships, strong and inclusive communities, good health, financial and personal security, rewarding employment, and a healthy attractive environment.' (DOH, 2010)

Mental wellbeing is therefore a component of overall wellbeing, although it is clear that all aspects of wellbeing- mental, social and physical can be imagined to be challenged under the circumstances surrounding coronavirus and its response in society.

Mental Health

The World Health Organization (2005) defines mental health specifically as *"a state of wellbeing in which the individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community"*.

Mental disorders:

Mental disorders are described as *"a broad range of problems.....generally characterized by some combination of abnormal thoughts, emotions, behaviour and relationships with others"*. Examples include schizophrenia, depression, anxiety disorders, intellectual disabilities, autism, dementia and disorders due to drug abuse. (WHO, 2013).

Relationship between wellbeing and mental illness.

There is a close relationship between wellbeing and mental illness. Wellbeing reduces the risk of mental ill health, whilst mental ill health reduces wellbeing. The promotion of wellbeing is therefore important for prevention of mental illness, and also recovery from mental ill health (Bradford Council, 2019).

Theoretical impact of COVID-19 on mental health

Based on knowledge of risk and protective factors for mental health, and baseline levels of mental health across the district, we might be able to highlight communities that are particularly at risk of a deterioration in their mental health during this period. This is likely to be those populations that:

- A) Already have high levels of poor wellbeing and mental
- B) Are more exposed to risk factors for poor mental health during coronavirus
- C) Are less able to maintain participation in protective factors for wellbeing.

Although this needs assessment is largely considering need across the life course, we should be mindful that poor wellbeing may develop in communities defined geographically or socially- for examples in areas of deprivation that might expect to be worst hit, not only by coronavirus but by the socio-economic impact of the lockdown measures. There are therefore likely to be huge inequalities in the impact on MH in our population at this time, although a larger overall proportion of the population is likely to be affected in some way, at some point in time by poor mental wellbeing or mental illness.

While much of the impact of COVID-19 may still remain unknown, it may be possible to apply learning that has been gathered in response to natural disasters which may have similar features to the sudden onset of a global pandemic. A paper focussing on the psychological impact of natural disasters (Shultz et al) indicated that disasters possessing two or more of the following features may exhibit pronounced mental and behavioural impacts:

(1) large numbers of injuries and/or deaths [potentially covid19], **(2) widespread destruction and property damage**, **(3) disruption of social support and on-going economic problems [certainly covid19]** and **(4) intentional human causation.**

The psychological impact of the disaster continues well past the initial physical harm, as loss and change are enduring features for the population as they adjust to disruption in normal lives and services, and respond to scarcity in basic needs and resources. The extent to which mental and behavioural impacts are seen might be related to the nature of the hazard and the individual's experience of this- for example, the intensity, duration and frequency of exposure to the harm as well as proximity to its centre. (Shultz et al) .Relating this to COVID-19, we might expect some populations to be more affected than others- including those that have been more directly affected by serious disease, front line staff who have cared for COVID patients and those that need to endure lockdown restrictions for the greatest period of time.

Time frame

The impact of mental health upon populations will likely evolve over time with some impacts of the COVID-19 pandemic emerging early and in line with the main response to the pandemic in the UK. Other impacts may emerge at a later stage, when the initial health response to COVID-19 has largely passed, but when the economic (and therefore social) consequences are likely to become more apparent.

Theoretical impacts- which risk factors and aspects of mental health are likely to be exacerbated in the immediate response to COVID-19?

(These impacts are based purely on application of existing knowledge to the context surrounding COVID-19);

Immediate impact

- Isolation and loneliness
- Stressful living circumstances, child abuse, domestic violence
- Alcohol and drug use, gambling
- Health related anxiety (both directly attributable to COVID-19 and indirect consequences of the response such as delayed treatment)
- Bereavement
- Food poverty/insecurity
- Carer stress
- Concern over employment and unemployment, significant financial worries, suicide
- Anxiety and depression
- Exacerbation of existing mental health conditions and difficulties accessing normal MH services, including those for people with serious mental illness (SMI).
-

Of immediate impacts, some may resolve following the 'peak' of the outbreak, and a return to normal living circumstances. This might include aspects of isolation, concern over food and medical supplies, and acute COVID-19 health anxiety. However, it is currently unknown how long the return to normal circumstances will take, and for some, the economic and social impact of COVID-19 will not allow a return to normal life.

Likely longer-term impact

- Impacts related to likely economic downturn including further unemployment, loss of business, homelessness, ingrained poverty, suicide.
- Ongoing distress due to bereavement
- PTSD- particularly health and social care workers exposed to distressing sights and challenging work conditions, and members of the public having lost family members in particularly tragic circumstances.

- On-going depression and anxiety triggered by the initial COVID response
- Issues with addiction, for example online gambling, alcohol and drugs.

- Some health-related anxiety may continue (eg delayed treatment or diagnosis of cancer)
- Poorer physical health as a result of delayed treatment during COVID-19

Results : Local Data

Baseline mental health disorders in Bradford

This section outlines baseline levels of diagnosed mental health disorders in Bradford, mostly drawing upon data from 2017-2019. Local data to indicate socio-economic inequalities across these mental disorders (for example, by socio-economic status, or ethnicity) are not available and these rates therefore represent averages across the age groups.

Table 1: Mental health disorders in Bradford populations across the life course (Data source: PHE Fingertips: Mental health, dementia and neurology unless otherwise stated)				
Population group	Mental health condition/ situation	Estimated count	Estimated frequency (prevalence / incidence/ count)	Notes
Pregnancy and perinatal period	Postpartum psychosis	12	n/a	2017/2018. Estimated number of women.
	Severe depressive illness in perinatal period	174	n/a	2017/2018. Estimated number of women.
	Mild- moderate depressive illness and anxiety in perinatal period	580-870 (lower-upper estimate)	n/a	2017/2018. Estimated number of women.
Children and young people (CYP)	Mental disorders (total)	12,341		2017/2018. Estimated numbers of CYP with mental disorders. (5-17 years)
	Emotional disorders (anxiety disorders and depression)	Estimated 3,492 based on ONS populations	3.8%	Estimated prevalence, aged 5-16 years. 2015 data.
	Hospital admissions as a result of self-harm.		581.4/ 100,000	2018/19 data. 10-24 years.
	Percentage of looked after children whose emotional wellbeing is a cause for concern	106	32.3%	2018/19 data.
	Autism	1,128	10.9/ 1000	Children with autism known to schools 2018 in Bradford district
	Learning disability	6,958	7.0%	Pupils with Learning Disability: % of school aged pupils (2017) 2 nd highest in YH. Significantly higher than YH (5.8%) and England (5.6%)
Working age adults 16-64 years	Psychosis (new cases)		26.8/100,000	2011 data. Estimated incidence from modelling data, via Fingertips
Adults (all ages) ≥16 years	Common mental disorder (CMD) prevalence	Estimated 79,493 based on ONS populations	19.5%	2017 data. CMD= any depression or anxiety. Estimated prevalence in PHE fingertips

				based on data from the APMS.
	Depression	50,305 person	11.4%	2018/19 prevalence age 18+ district estimate
	Serious mental illness (SMI)	6,069 persons	1%	SMI includes major depressive disorder, schizophrenia and bipolar disorder. 2018/19 prevalence QOF. District estimate.
	Autism	4505 – (ONS 2018 population estimates)	11/1000 (95% CI 3–19/1000)	National estimate. Data source: Adult Psychiatric Morbidity Survey (2007) and Intellectual Disability Case Register study (IDCR) (2010) combined.
	Suicide	Average 38 deaths per year	8.1/100,000 115 over three year period.	Data from BD JSNA: 2016-18 period.
Adults (all ages) ≥18 years	Learning disability – adults receiving long term support from the LA	1510	3.82 per 1000	2018/19 data Rate similar to YH (3.63) and significantly higher than England (3.42)
Older population ≥65 years	Common mental disorder (CMD) prevalence	Estimated 8,928 based on ONS populations	11.4%	2017 data. CMD= any depression or anxiety
	Dementia	4,280	5.01%	Prevalence. 2019 data.
Whole population	Learning disability (QoF)	3,811	0.6%	2018/19 QoF data – Same as YH proportion
	Emergency hospital admissions for intentional self harm		266.2/ 100,000	2018/2019 data

Baseline risk and protective factors for mental health across the life course

Certain risk factors are known to be associated with poor mental health and in some cases mental illness. The risk and protective factors for mental health highlighted in Tables 2a and 2b are those that data is currently recorded on under the PHE fingertips site. Other risk and protective factors for mental health may also be important, and can be added to this needs assessment where data is available. Appendix 1 lists risk and protective factors for poor wellbeing, taken from the Bradford JSNA which represent a slightly broader range of factors.

Table 2a: Risk factors for mental health in Bradford (Data source: PHE Fingertips: Mental health, dementia and neurology)				
Population group	Risk factor for poor mental health	Estimated total numbers	Prevalence, or figure	Notes (NB: To add dates)
Children and young people (CYP)	Low birth weight (%)	277	4.16%	2018 data. Highest rate of low birth rate in Y&H. Significantly higher than Y&H: 3.14%, England: 2.86%.
	Overweight and obesity (%)	1,451 2,773	Reception: 21.8%. Year 6: 38.3%	2018/19 data. Reception age, increasing. Y&H: 23.7% England: 22.6%. Year 6: increasing, highest in Y&H. England: 34.3%
	Children in low income families (%)	34,745	23.8%	2016 data. Significantly higher than Y&H (19.5%) and England (17%)
Working age adults 16-64 years	Employment deprivation		0.162	2015 data. Proportion of working age population who can't work due to unemployment, sickness, disability or caring responsibilities. Bradford in worst third of Y&H. England: 0.119 Higher figures show greater deprivation
Adults (all ages) ≥18 years	Overweight and obesity (%)	Estimated 243,028 based on ONS populations	61.5%	2017/18 data. 18 years and older. Adult overweight and obesity- similar to England average (62%). Lower than Y&H (64.1%), not significantly so.
Whole population	Fuel poverty (% of households) (2017)	27,767 households	13.5%	Highest in Y&H. Y&H: 10.6% England: 10.9%
	Statutory homelessness	116	0.6/1000 households.	2017/18 data. Households in temporary accommodation, per 1000 total households.

	(priority need).			Increasing. Significantly higher than Y&H (0.4/1000). England: 3.4/1000.
	Homelessness, not in priority need by LA	93	0.4/1000 households.	2017/18 data. Typically single homeless people. Significantly lower than Y&H (1.0/1000) and England (0.8/1000).
	Violent crime	28,190 offences	52.7/1000 population.	2018/2019 data. Violent offences per 1000 population. Second worst in Y&H. Significantly higher than Y&H: 36.9/1000 and England 27.8/1000.
	Domestic abuse related incidents and crimes		38.9/ 1000	2018/19data. Similar to several other regions in Y&H.
	Admission episodes for alcohol related conditions	13,869 admissions	3,035/ 100, 000	2018/19data. Bradford rate is second highest in Y&H.

Table 2b: Protective factors for mental health in Bradford (Data source: PHE Fingertips: Mental health, dementia and neurology)				
Population group	Protective factor for poor mental health	Estimated total numbers	Prevalence, or figure.	Notes
Working age adults 16-64 years	Employment	213,400	66.0%	2018/19 data. 16-64 yrs in employment. Lowest rate in Y&H. Y&H: 73.7%, England: 75.6%
Adults (all ages) ≥19 years	Physical activity	Estimated 240,166 based on ONS populations	61.9%	2017/2018 data. ≥19 years doing at least 150 MIE minutes physical activity per week. Y&H: 64%. England: 66.3%
Whole population	Housing quality: indoor living environment.		IMD score of 35.7.	Proportion of homes failing to meet standards on fitness for habitation, disrepair, modern facilities and thermal comfort. Bradford has the poorest score in Y&H. England: 22.1. Higher scores indicate greater deprivation.

Interpretation: Baseline risk factors for mental health are poor in Bradford currently when compared to rates across Y&H and England. This includes a range of factors such as overweight in children, children in low income families, inability to work, violent crime and alcohol related admissions. The exception of this

is single person homelessness, which is lower in Bradford than the Y&H and England average. Protective factors for mental health, including quality indoor living environments, the level of employment and rates of physical activity are also lower than average rates across Yorkshire and Humber and England.

Most, if not all of these risk factors can be envisaged to be exacerbated under conditions linked to the coronavirus response. Simultaneously, the ability to maintain key protective factors for mental health may well be challenged during the Stay at Home restrictions.

When considered together, this implies that Bradford as a population may be particularly susceptible to deterioration of mental health and wellbeing during this time. However, many varied and considerable responses have already been put in place by Bradford Council and partners in order to mitigate against some of the adverse consequences of the lockdown policy, including actions to strengthen community responses and ensure the most vulnerable in society are protected.

Health inequalities

The data presented here reports average rates across the district and there will inevitably be significant inequalities in the degree to which certain groups of the population are more at risk of mental illness and poor wellbeing. In particular, we know that some ethnic minority groups, including Black men, are overrepresented among those with serious mental illness. Furthermore, national research indicates that ethnic inequalities are present in several risk factors which may predispose to poor mental health during coronavirus, including type of housing, stability of employment, domestic abuse, migrant status and access to healthcare as well as underlying chronic ill health (Qureshi et al, 2020).

Emerging evidence of the impact of coronavirus in the UK

In a recent position paper outlining mental health research priorities during COVID-19 (Holmes et al, 2020) authors theorised that the likely consequences of COVID-19 would be to increase **social isolation and loneliness**. These symptoms of poor mental health are themselves strongly associated with further mental health problems including anxiety, depression, self-harm and suicide attempts (Elovainio, 2017 and Matthews, 2019). They suggest that tracking loneliness and intervening early on risks and buffers for this symptom would be an important priority.

Two surveys conducted by the UK Academy of Medical Sciences and the research charity MQ: Transforming Mental Health informed the position paper- one, of over 2000 people with lived experience of mental health, and the other- a nationally representative sample of the general population, aged 16-75 years. Those with previous experience of mental health issues expressed concerns about **social isolation, increased feelings of anxiety and depression** and particular concerns about exacerbation of pre-existing MH issues. There were also **reported difficulties in accessing MH services** and support during the coronavirus pandemic. Concerns over the effect of COVID on the mental health of children and older people were also expressed (Holmes et al, 2020).

Further recent surveys within the UK expand on these findings. The 'Life Under Lockdown' survey (Ipsos Mori and Kings College London) found that nearly half of participants had felt more anxious or depressed than normal as a result of COVID. **Younger people were more likely to find it very difficult to cope** (42% of 16-24 year olds stated they were finding it extremely difficult to cope, compared to 15% overall). There appeared to be a **financial impact** already-

22% were either very likely or certain to experience difficulty affording basic essential and housing costs or had already experienced this. 16% of workers had already lost their jobs or were certain/ very likely to.

Change in health- related behaviours: Findings from ‘Life Under Lockdown Survey’ of the UK general population:	
Risk behaviours for mental health	Protective behaviours/ help seeking
<ul style="list-style-type: none"> • 38% slept less or less well than normal. • 35% ate more food or less healthy food than normal • 19% consumed more alcohol than normal • 19% argued more with their family or housemates than normal • 7% Used non-prescription drugs to deal with stress or anxiety 	<ul style="list-style-type: none"> • 83%: Contacted family and friends more by phone or video calls and texting apps. • 49% Exercised outside home • 42% Exercised at home, for example, using online tutorials/videos • Help seeking: 6% had phoned a counselling or support service • Social support: 60% have offered help to others, and 47% have received help from others.

The ONS is conducting weekly surveys into the social impact of coronavirus. The most recent survey found that **coronavirus was affecting wellbeing to a greater extent in those with an underlying health condition** (55.6%) compared to adults in general (49.9%). This figure was slightly lower for those aged 70 years and over, at 45.5%. Nearly one in four (23.9%) of those whose well-being has reportedly been affected said it was making their mental health worse (ONS, 2020a).

Suicide risk factors during COVID-19:

Suicide is a tragic aspect of mental health and beyond the loss of individual life, can significantly impact the lives of family and friends. A recent paper indicated that many of the emerging consequences of the coronavirus pandemic and the policy response are known risk factors for suicide (Gunnell, 2020). These include;

- Loss of employment and financial stressors
- Increased alcohol use and domestic violence
- Social isolation, loneliness and entrapment
- Anxiety, depression, PTSD

The paper presented a range of suicide prevention strategies during COVID-19, including actions that could be taken by government, mental health services, retailers, communities and the media (Gunnell, 2020).

Emerging evidence globally

SARS, 2003. Evidence relating to the impact of previous epidemics has been commonly referred to in the literature. Whilst not perfect, this may give an indication of common mental health impacts and effective interventions. Following the SARS outbreak in 2003, patients who had experienced severe illness were at risk of depression and PTSD and around 50% of recovered patients remained anxious. There was a 30% increase in suicide in those aged 65 years and older and probable emotional distress occurred in 29% of healthcare workers (Holmes et al, 2020).

Literature review: COVID-19 and mental health (Rajkumar, 2020)

A recent review paper (Rajkumar, 2020) gathered evidence and opinion from 28 publications on mental health and COVID-19. Most of the pieces were commentary or correspondence, with 2/3 originating from China. One online survey of the general population in China indicated rates of moderate to severe depression occurring in 16.5% of their sample, as well as moderate to severe anxiety symptoms being expressed in 29%. Anxiety was seen to be the predominant psychological response to COVID in this review. Symptoms of severe stress were also reported by 8% of those completing the survey.

Proposed at risk groups: Bradford population

Certain groups of the population are already at risk of mental ill health (see table 3 below), and it is likely that these groups will remain at risk during COVID-19. In some situations, risk of mental illness in these groups may decrease (for example, removal of significant daily stressors in their lives as a result of changing circumstances). This will be very dependent on contextual factors such as local service provision, family and individual circumstances.

Further at-risk groups for mental illness during the period of coronavirus have also been highlighted (table 4). This is informed by our existing knowledge of MH risk and protective factors, and a **systematic, theoretical, rapid consideration of how these factors may act to increase MH risk in some populations (Appendix 1)**. It is also informed by emerging academic evidence, although this currently consists of cross-sectional surveys, correspondence and commentary pieces, largely from China. As more evidence emerges, both from service provider feedback, and academic studies (particularly in the UK), this table can be defined if necessary.

Risk and protective factors for mental health issues during COVID-19 are likely to evolve over time, either worsening in response to continued lockdown measures, or improving in response to mitigation. The information in the appendix might therefore take on a 'dashboard' function, highlighting which life course groups remain at risk of poor mental health and illness as the pandemic and its response progresses. Health inequalities will invariably remain within each of the life course groups and although this information is not presented explicitly in the table, issues such as gender, socioeconomic status and ethnicity should also be considered.

Table 3: Known at risk groups for mental ill health (Bradford JSNA, 2019)	
Children and young people	<ul style="list-style-type: none"> Looked after children Children with a learning disability Children with a physical illness Children with parents who has a mental illness Young men in custody
Adults	<ul style="list-style-type: none"> Homeless people Adults with long term conditions Some Black and ethnic minority groups Pregnant and postnatal women Prisoners Adults with a learning disability LGBTQ

Table 4: Estimated at risk groups for poor mental health during coronavirus. Bradford population, 2020. (Application of findings from Holmes, 2020; Gunnell, 2020; Rajkumar 2020)		
Population group	Bradford data	Rationale
<i>Pregnant and postnatal women, (and partners)</i>	<ul style="list-style-type: none"> 7300 pregnant women. 7,244 births in 2018 (latest data) 3 month period approx. 1,811 (nomis census) 	<p>Pregnant women may be more at risk of acquiring COVID-19 infection due to lowered immunity. Concerns about spread to new born baby.</p> <p>Postnatal lack of support, face to face groups etc. Social and professional support may be limited.</p> <p>This group identified as at risk from an evidence review from China.</p>
<i>Young persons with poor support mechanisms in place</i>	<ul style="list-style-type: none"> Children in POVERTY: 17,656 claim free school meals Household in most deprived areas: 266,500 Children in care 2019 – 1,160 children – fingertips Children in need – 8,932 (2017/18). Rate of 631 children per 10,000 children age <18 years. 	<p>Children in need – defined as children who have been referred to social care services age <18.</p> <p>Young persons highlighted as struggling more than middle aged in Kings College survey.</p> <p>Children from deprived backgrounds will be more exposed to a range of factors that pre-dispose poor mental health..</p>
<i>Patients with COVID-19, plus</i>	<ul style="list-style-type: none"> • Number of patients affected by COVID-19 	Evidence from China has suggested that patients who acquire

close family and friends	<p>confirmed cases – 726</p> <ul style="list-style-type: none"> Number of confirmed COVID-19 patients requiring critical care – 49 Number of COVID-19 deaths – 260 in total <p><i>(NB these figures will change daily)</i></p>	coronavirus are at increased risk of mental ill health, including anxiety, fear and guilt of passing the infection on. Family and friends of affected patients may also be at risk of MH issues, particularly following bereavement.
Groups at high risk of unemployment, low income or loss of financial support.	<p>29,000 self employed 1,500 not covered by existing scheme (ONS estimate 5% not covered) People with flexible or temporary contracts and their households : 5,500 (ONS)</p>	<p>Financial instability and unemployment are key risk factors for suicide. Loss of income may also increase risk of eviction from housing. (See Bradford JSNA, section on suicide).</p>
Front line health and social care staff	<p>Number of frontline healthcare workers 2018/19 Airedale NHS Foundation Trust – 1,657 Bradford Teaching Hospitals NHS Foundation Trust – 4,900</p>	Evidence from China that front line health care staff are more likely to report symptoms of poor wellbeing than those in other positions.
Patients with a history of mental illness	See table 1.	<p>Group that is presumably vulnerable to mental illness and decline in wellbeing- identified in the literature. NB: Elderly with existing MH conditions suggested as at risk group from research in China (NB might be applied from SARS)</p>
Adults with multiple long-term conditions.	<p>Shielded group: 16,000 Physical disability: 2,947 (CCG)</p>	Substantially higher risk of mental illness in adults with multiple long-term conditions. Risk increases as number of LTC increases. Increased risk of COVID in this group may increase health related anxiety.
Elderly	Over 70s: 51,000	Evidence from a review of MH in COVID (mostly Chinese studies) identified elderly as an at-risk group.
Carers (any age)	<p>15,110 carers 251 registered young carers</p>	<p>Caring responsibilities can increase feeling of stress, anxiety and depression (MHF). Young carers are also at risk of MH problems. (MHF). Data from CCG: People with an unpaid caring responsibility- however, many carers are not registered.</p> <p>2011 census 57,637 people in Bradford and Craven identified themselves as carers.</p>
Groups at increased risk of abuse	Victims of domestic violence - 21,300 (male=7,100, female= 14,310)	Research suggests that women experiencing domestic violence are more likely to suffer from a mental health problem.

		Local numbers based on applying British Crime and Victim Survey data to population data. Current number of people at risk unknown.
<i>Socially isolated members of society.</i>	<p>Statutory homelessness in Bradford District 2017/18 = 379 people rate 1.8 per 1,000 households. Source: Fingertips</p> <p>85.1% of Bradford district's population speak English as first language, 14.9% do not speak English as their main language – source: nomis census 2011</p>	<p>For example through homelessness, stigmatisation, discrimination, language or cultural barriers, disability. Includes homeless populations, asylum seekers and migrants. Multiple risk factors for mental illness and poor wellbeing.</p> <p>Evidence from a review of mental health during COVID-19 identified vulnerable populations as being at risk of MH, including migrant workers, homeless and Chinese populations overseas (risk of discrimination).</p>

Conclusions

The rapid mental health needs assessment has highlighted the range of mental health conditions across the life course in Bradford, and has outlined a series of risk and protective factors for mental health. These factors include social determinants such as income, employment and housing, lifestyle factors such as alcohol use and physical activity, and social factors such as participation in community.

Emerging evidence from surveys in the UK and globally suggests that social isolation and loneliness may be key consequences of the lockdown policy, and mental health symptoms such as stress, coping ability, anxiety, depression and concern over finances are already being expressed.

Several risk factors for suicide are anticipated to be exaggerated during the COVID response.

At risk groups for poor mental health during coronavirus include those with existing mental health conditions, those who may be impacted by coronavirus directly (for example, health and social care workers, patients and their families), and those who might be adversely affected by the social or economic impact of lockdown, including young people, those of working age, pregnant women and elderly members of the population. Socially isolated groups within society may also be at risk of mental health problems at this time.

Next Steps

Papers 2 and 3 of the needs assessment will aim to gather intelligence and data from service providers across the system, whose work has relevance for mental health prevention or treatment.

- This may feed into surveillance of mental health conditions during this time (for example, helping us to understand and monitor the nature of mental illness during this time).
- Secondly, the level of demand and capacity of services to respond may help to highlight where further resource and support is required.
- A priority area of feedback would be from services that provide prevention or therapeutic support to those with existing mental health problems.

Given that risk factors for mental health occur across the determinants of health, whereas the life course approach involves a focus on subgroups of the population, horizontal and vertical pathways could be used to map MH service provision across the system (see Figure 1 below):

Figure 1: System wide mapping of services against MH need- vertical and horizontal pathways

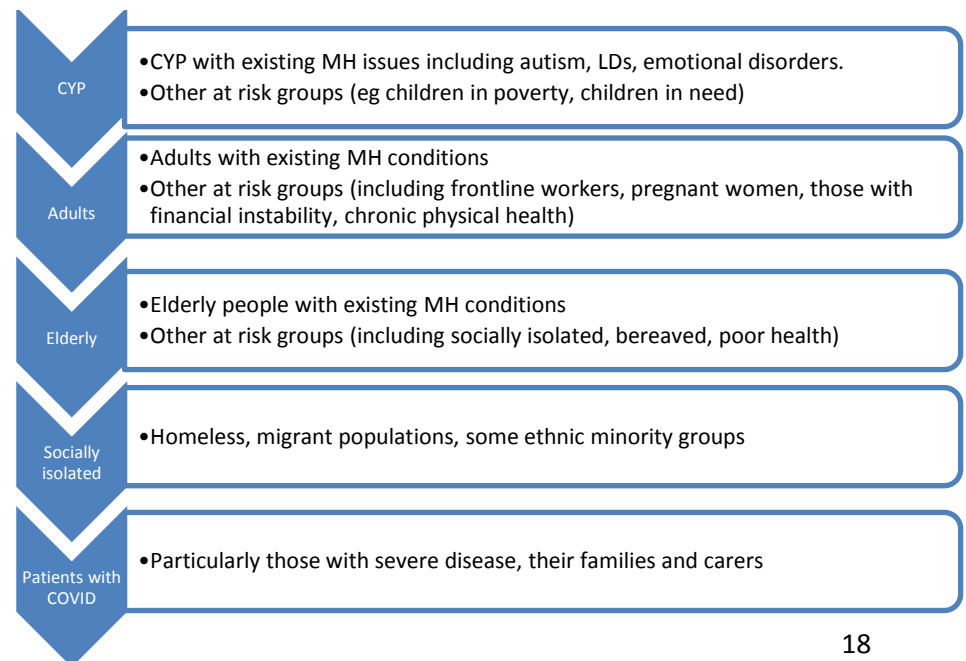
Services with potential impact on MH (horizontal provision)

Which services are being delivered across the district that impact on risk and protective factors for mental health? This requires a system wide view including services aimed directly at MH support as well as services impacting on wider determinants of health.



At risk population groups for poor MH during COVID-19 (vertical need) (see Table 4 for complete list)

Are existing preventative and therapeutic services reaching these groups? Are tailored and targeted approaches required?



Appendix 1: The potential impact of COVID-19 on protective factors for mental wellbeing (Protective factors for mental wellbeing identified from Bradford Council JSNA, 2019).						
Protective factors	Postnatal and Pre-term	0-5 yrs	School years	Working age adults	Old age	Notes
Good quality antenatal and postnatal care.	Unclear					How are current services impacted?
Early years (upbringing, experiences and nurturing)		May be impacted for newborns during this period.				Service provider feedback useful here.
Good quality education		Reduced	Reduced	Reduced		Impact will likely depend on amount of time that education providers are closed for.
Employment*				Reduced		Some sectors protected by Government policy e.g. furlough. Understanding of which sectors are worst affected would be helpful. May identify key at risk groups for mental illness. Business owners?
Income*	Variable impact	Variable impact	Variable impact	Variable impact	Pension protected. Other income?	Reductions in income will impact across the life course. Likely to impact on most deprived to greater extent. Understanding of which sectors are worst affected would be helpful.
Community trust and participation	Reduced +		Reduced+	Reduced	Reduced ++	Will vary depending on existing community networks and resilience. May increase in some areas and positively impact on wellbeing. Community engagement often easier when existing social ties are in place. Some groups may be less able to maintain community participation via remote methods.
Meaning, purpose and spirituality	Unclear		Reduced with lack of	Reduced with loss of	Reduced access to	Volunteering opportunities may help to reinforce feelings of meaning and purpose. Not all will be in

			school structure	employment	spiritual support	a position to take part. Impact on inequalities to be considered- are there ways to encourage volunteering across SES groups? Any analysis of volunteer base so far? May support movement into training/employment post COVID.
Culture						Needs consideration. May be more important to some groups of the population.
Positive relationships	Reduced ++	Reduced +	Reduced +	Reduced	Reduced +	A lack of opportunity to maintain or build new positive relationships may affect some populations during covid to a greater extent than others. This might include new parents who lose the opportunity to form new support networks during this time, as well as any group which lacks access to digital technology to maintain existing relationships. Particularly concerning for those people in care homes or in-patients, lacking access to family and friends when vitally needed. Young people may be in a stage of their lives where face to face contact with friends and wider family is still very important in maintaining wellbeing.
Physical activity	Reduced	Reduced	Reduced	Reduced	Reduced +	Likelihood that this will be reduced on the whole due to lack of mobility/active travel.- needs research to confirm this however. Expect a greater impact in more deprived areas-particularly residents that do not have gardens or easy access to green space.
Access to green space	Reduced	Reduced	Reduced	Reduced	Reduced	Expect a greater impact in more deprived areas-particularly residents that do not have gardens or easy access to green space. Particularly concerned about high rise flat occupants in urban dwellings.
Good physical health	Variable	Variable	Variable	Likely decrease	Likely decrease	Unclear, would need further research. Negative physical impact of COVID across life course, but especially in older populations. Potential for poorer physical health across the

						<p>lifecourse as a result of lower physical activity, less engagement with health services, possible increase in alcohol consumption.</p> <p>May be some positives seen in some circumstances e.g.. decreased work stress, time to exercise at home. Possibility that some socially isolated members of the population may see improvements in health, if circumstances have improved (for example, homeless people being given accommodation and food).</p>
--	--	--	--	--	--	--

*Income and work are two of the most important determinants of mental health and wellbeing

Appendix 2: The potential impact of COVID-19 on risk factors for mental wellbeing (Risk factors for mental wellbeing taken from Bradford JSNA, 2019 unless otherwise stated).						
Risk factors	Postnatal and Pre-term	0-5 yrs	School years	Working age adults	Old age	Comments
Substance misuse		Indirect impact.	May increase	May increase	Unclear	Anecdotal reports of increase in alcohol and drugs use. Would need further service provider input to understand which groups are most affected. Consider migrant populations. Substance misuse within families will indirectly impact on child health and wellbeing.
Deprivation	Variable impact	Variable impact	Variable impact	Variable impact	Variable impact	Needs further exploration. Some populations will be more severely affected by loss of employment and earnings. Unclear whether existing benefits will be affected. Impact may become more apparent depending on length of lockdown.
Fuel poverty;						Increase in bills at home may be experienced by some. May become more important if second wave of COVID occurs in Winter 2020.
Poor housing	Variable impact	Variable impact	Variable impact	Variable impact	Variable impact	Impact of poor housing on mental health likely to be exacerbated due to social isolation (increased time spent in home environments). This risk may be greatest in areas of poor quality housing, with multiple occupancy and no outside space.
Loneliness*	Variable, potential increase	Unclear	Likely increase	Variable	Likely increase	Loneliness is identified as a key risk factor for mental health and is anticipated to contribute to poor wellbeing during COVID-19. The elderly, those living alone and young people might be most at risk of increased feelings of loneliness during this time. It may also impact on pregnant women and new parents who are less able to engage in social groups.
Social isolation*	Variable	Variable	Variable	Variable	Likely increase	Recognised that social isolation and loneliness may not occur in same groups, or via same pathways. May affect some groups more than others, including those living alone, those lacking access

						to online technology and those with limited support networks or participation in society prior to COVID-19.
Stressful work;	Potential to increase			Potential to increase	Potential to increase	Variable impact expected- some may benefit from changes to normal working patterns. Some may experience increased work stress, especially those involved in COVID response, and supporting industries.
Experiencing a mental disorder	Potential to increase	Potential to increase	Potential to increase	Potential to increase	Potential to increase	All groups with experience of a MH disorder may be more vulnerable to exacerbation of poor mental health during this time. This may relate to changes in service and support provision for existing MH conditions, or may relate to underlying risk factors for poor mental health in these groups.
Physical ill health				Higher risk of increase	Higher risk of increase	Increasing risk of serious implications of COVID-19 with age. Risk of chronic physical health conditions also typically increase with age..
Unemployment.				Increased		Likely increase in unemployment during this time, however some mitigation by government and some re-deployment, re-training taking place. Will become more apparent when economic impact of COVID unfolds.

*Social isolation and loneliness are identified as likely risk factors for poor mental health during COVID-19 (Holmes et al, 2020). Social isolation can be defined structurally as the absence of social interactions, contacts, and relationships with family and friends, with neighbors on an individual level, and with “society at large” on a broader level (Institute of Medicine, 1992). Loneliness has been described as: “a subjective, unwelcome feeling of lack or loss of companionship. It happens when we have a mismatch between the quantity and quality of social relationships that we have, and those that we want.” (Perlman and Peplau in 1981, in ONS, 2018).

Figure 2: Life course model for mental health in COVID (Jim McMannus)

Mental Health Impact of COVID-19 Across Life Course



	Pre-Term	0-5 Years	School Years	Working Age Adults	Old Age
Key issues to consider	<ul style="list-style-type: none"> • Anxiety about impact of COVID on baby • Financial worries • Anxiety about delivery and access to care • Isolation 	<ul style="list-style-type: none"> • Coping with significant changes to routine • Isolation from friends • Impact of parental stress and coping on child 	<ul style="list-style-type: none"> • School progress and exams • Boredom • Anxiety or depression or other MH problems • Isolation from friends • Impact of parental stress 	<ul style="list-style-type: none"> • Balancing work and home • Being out of work • Carer Stress • Anxiety about measures and family or dependents or children • Financial Worry • Isolation 	<ul style="list-style-type: none"> • Isolation and disruption of routine • Anxiety from dependent on services • Financial worry • Fear about impact of COVID if infected
Staff/Vols	Cumulative load of stress from significant changes. Traumatic incidents. Isolation from work colleagues. Having to manage working from home. Potential bullying from or to others as part of not coping				
Loss	Loss of loved ones dying may be particularly severe and grieving disrupted because of inability to do normal grieving rites eg as be physically close to dying person, have usual funeral rites, attend funeral etc				
Specific Issues	Impact of delayed diagnoses and treatment (eg chronic conditions,surgery, people living in pain) Suicide and self harm risk for most at risk populations. Members of faith communities may feel disconnected during closure of premises. Domestic abuse may be issues across lifecourse. Drug and Alcohol issues .People reliant on foodbanks or on low incomes or self employed may have additional stress.				

References:

1. Bradford Council. 2019. Public Health- Joint Strategic Needs Assessment: Mental Wellbeing. <https://jsna.bradford.gov.uk/Mental%20wellbeing.asp> [Accessed 20/04/2020].
2. Public Health England. Mental Health and Wellbeing JSNA. (2019). <https://fingertips.phe.org.uk/profile-group/mental-health/profile/mh-jsna> [Accessed 20/04/2020].
3. Mental Health Foundation: Mental health Statistics: social determinants. <https://www.mentalhealth.org.uk/statistics/mental-health-statistics-social-determinants> [Accessed 29/04/2020].
4. World Health Organization, 2005. Promoting mental health: concepts, emerging evidence, practice. Geneva: WHO. Available at http://www.who.int/mental_health/evidence/MH_Promotion_Book.pdf
5. ONS: (2020a). Coronavirus and the social impacts on Great Britain: 9 April 2020. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/9april2020> [Accessed 12/04/2020]
6. ONS (2020b): Coronavirus and the social impacts on Great Britain: 23 April 2020. <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandwellbeing/bulletins/coronavirusandthesocialimpactsongreatbritain/23april2020> [Accessed 29/04/2020].
7. Department of Health (2010). Our health and wellbeing today.
8. World Health Organisation. (2013). Mental Health Action Plan 2013: 2020. https://www.who.int/mental_health/publications/action_plan/en/
9. Duffy, B. (2020). Life Under Lockdown. Kings College London: <https://www.kcl.ac.uk/news/life-under-lockdown-coronavirus-in-the-uk> [Accessed 12/04/2020].
10. Rajkumar, R.P. (2020). COVID-19 and mental health: A review of the existing literature *Asian J Psychiatr*.52: 102066.. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7151415/>.
11. **Shultz et al. (2007). Psychological Impacts of Natural Disasters.**
12. Institute of Medicine (US) Division of Health Promotion and Disease Prevention (1992). The Second Fifty Years: Promoting Health and Preventing Disability. Berg RL, Cassells JS, editors. Washington (DC): [National Academies Press \(US\)](https://www.ncbi.nlm.nih.gov/books/NBK235604/). <https://www.ncbi.nlm.nih.gov/books/NBK235604/>.
13. ONS (2018). Measuring loneliness: guidance for use of the national indicators on surveys. <https://www.ons.gov.uk/peoplepopulationandcommunity/wellbeing/methodologies/measuringlonelinessguidanceforuseofthenationalindicatorsonsurveys> [Accessed 29/04/2020].
14. Qureshi et al. (2020). Submission of evidence on the disproportionate impact of COVID-19 and the UK government response, on ethnic minorities in the UK. University of Edinburgh Global Health Policy Unit.

15. Holmes et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry*. DOI:[https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
16. Elovainio M. et al. (2017). **Contribution of risk factors to excess mortality in isolated and lonely individuals: an analysis of data from the UK Biobank cohort study.** *Lancet Public Health*. **2**: e260-e266.
17. Matthews T., et al. (2019). **Lonely young adults in modern Britain: findings from an epidemiological cohort study.** *Psychol Med*. **49**: 268-277.
18. Gunnell et al. (2020). Suicide risk and prevention during the COVID-19 pandemic. *Lancet Psychiatry*. [https://doi.org/10.1016/S2215-0366\(20\)30171-1](https://doi.org/10.1016/S2215-0366(20)30171-1)
19. Kirkwood, T., Bond, J., May, C., McKeith, I. and Teb, M., 2008. Foresight Mental Capital and Wellbeing Project. Mental capital through life: Future challenges. London: The Government Office for Science. Available at: http://www.bis.gov.uk/assets/BISCore/corporate/MigratedD/ec_group/99-08-FO_on.pdf
20. Van Schalkwyk et al. 2020. Covid-19: we must take urgent action to avoid an increase in problem gambling and gambling related harms. *BMJ*. <https://blogs.bmj.com/bmj/2020/04/06/covid-19-we-must-take-urgent-action-to-avoid-an-increase-in-problem-gambling-and-gambling-related-harms/>

Authors: Kate Questa, Mary Cronin, Sarah Mears, Duncan Cooper, Public Health, Bradford Council.

Kate.questa@nhs.net