Re-MIND

The impact of Covid-19 on Mental Health and wellbeing in Northern Periphery and Arctic countries

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INTRODUCTION

The direct and indirect consequences of Covd-19 on the mental health of the general population were anticipated to be considerable by many commentators. First, anxiety, depression, alcohol misuse and suicidality might increase in the general population. Grief, loneliness and isolation will play a role in all of these. Second, such impacts may be amplified for already vulnerable groups who rely on other people and organisations for care and support. However, the voluntary and community sectors have been impacted by the loss of finances and staff. Almost a year into the pandemic, front-line health workers are thought to be vulnerable to burn-out and trauma. Moreover, it is likely that while there are short-term impacts, longer-term psychological effects of lockdown and isolation are likely, created by economic disruption, unemployment and family breakdown.

While most people are able to maintain some degree of contact and support, many vulnerable groups, especially those living in rural and isolated areas of Europe, may be cut off from family, meaningful information and crucial services.   Concern about loneliness, particularly focussed on older people, has increased over the past decade and the assumption that the pandemic and lockdown will rapidly accelerate the prevalence of loneliness has been widely articulated in the media and policy-targeted documents.

Most countries have anticipated major negative impacts of the pandemic created through the implementation of measures to mitigate the distress caused by the coronavirus, quarantine and the personal, social and economic disruptions that follow. Thus, the more immediate impacts of anxiety, social isolation and loneliness are likely to be compounded by the economic impacts of actual and anticipated job loss for many people. Risk factors such as ill health, bereavement, domestic abuse and violence and maladaptive coping such as increased alcohol consumption, substance misuse and gambling are likely to contribute to increased disorders.

The anticipated increase in problems will occur at a time when access to services is severely restricted. The challenges to health and social care service delivery cannot be underestimated and innovative ways are needed to maintain connection to vulnerable people. The European Commission's *eHealth Action Plan 2012–2020*, stated that eHealth enables a more 'citizen-centric' system of care through increasing socioeconomic inclusion, patient empowerment, and access to services and information. Importantly, eHealth offers various major advantages, such as (1) supports information exchange; (2) improves access to health care; (3) reduces costs; and (4) improves public and individual health through personalized medicine.

Public and mental health services across the NPA region will have to manage a backlog of accumulated cases, exacerbated conditions and an expected surge of problems. There is a need to scope within the NPA and similar regions: (1) the current and projected impacts of covid on mental health; and (2) policies and planning to manage the crisis and develop innovative ways of service provision at statutory and voluntary levels.

January 2021

The study

We aimed (1) to assess the impact of Covid-19 on the mental health and wellbeing of participating NPA counties; (2) to explore the implementation of national and regional responses in order to mitigate damage to population mental health; (c) to consider and recommend potential examples of good practice.

What did we do?

We undertook a rapid review of the available information on the impact of Covid-19 on mental health and wellbeing in each of the partner countries and held interviews with a wide range of stakeholders such as policy makers, public health professionals and service providers. Our team of experts from across the NPA region and Canada, all of whom play key roles in the covid response, provided advice and supported the collection of information in their respective countries.

What did we find?

We uncovered significant variation in relation to the available evidence on the impact of the pandemic on mental health across different countries and regions, and the respective government policy and other responses. We describe these in the sections below. It is important to note that our findings can only represent a snapshot of the initial emerging information on the impact of Covid-19 and should not be considered robust. Evidence about the impact of the pandemic on the general mental health of the populations of each country and on the delivery of mental health services is still evolving, as each county faces different viral rates, phases and develops responses.

Predominantly, we have focused on the events (viral spread, medical response, restrictions/easing of restrictions) of late February through to the summer of 2020. The nature of the reviewed literature varies widely, from peer reviewed academic research studies, to academic articles, to comments made in the popular press. A wide range of surveys were examined, spanning from the earliest period in the pandemic through to the summer of 2020. These vary in sample size and depth of questioning. Often, we have only been able to access the 'headline' statistics presented to the public, and not the full survey. The research data used across this report is therefore not

robustly comparable and offers only a 'snapshot' of the mental health impacts of the Covid-19 pandemic.

During the period of the study we saw considerable divergence in the experience of the effects of the spread of Covid-19, from 23 000 cases per million population in Northern Ireland, to 2 400 cases per million population in the Western Isles; from 11 000 deaths in Canada, to no recorded deaths in the Faroe Islands.[i] There are also disparities in each country's general response to the virus, from Sweden employing guidelines and a lower level of 'less invasive' restrictions, to Ireland's imposition of a two kilometre limit from home, beyond which citizens were, for a period, not allowed to travel. Despite these differences, there were similarities in responses to the pandemic. Each country attempted to 'flatten the curve' of the rising numbers of cases primarily to ensure their healthcare services were not overwhelmed. In every country the healthcare system was able to cope with the demand of Covid-19 cases, however, in most cases services, such as general practice, were limited, and some surgeries and non-emergency procedures were postponed.

Key findings

The evidence gathered so far suggests that the Covid-19 pandemic and the measures taken to mitigate the spread of the virus has had a widespread negative impact on mental health

Research has consistently reported a general rise in the levels of anxiety and depression across the population. The Swedish Public Health Agency noted the 'effect of absences' – the lack of contact with elders, lack of employment, or key services, for example.[ii] In most contexts, contact with older people was either lessened or avoided. Other surveys showed evidence of worry and anxiety about the future in general and acknowledgement of how changes in life routines (education, work, healthcare) can be unsettling. Another recurring theme was concern about prolonged restrictions and the frustration of autonomy; the feeling that life had been 'put on hold' and people were no longer able to make plans. Some surveys evidenced changes in lifestyle for some people that might in time contribute to mental or physical ill health. These include having a more sedentary life, watching more TV, eating more, drinking more alcohol and smoking more.

Two reports, in Finland[iii] and in Ireland[iv] commented on the contribution of the intensity of the media reporting about the pandemic with concerns that such extensive media coverage has contributed to mental ill health.

It is important to stress that most studies published thus far have been opportunistic, undertaken at speed using data collected from non-random, relatively small samples, often using on-line platforms. Consequently, the problem of self-selection bias – whereby people with the greatest motivation and access to the questionnaire are likely to have participated - means that the findings are unreliable. Many such studies have been reported in the media with a high degree of sensationalism – in one instance in Ireland, a national newspaper reported that 40% of the population may be experiencing post-traumatic stress disorder (PTSD) – this was based on the findings of an online survey of less than 400 people, mostly students.

Nevertheless, more reliable evidence emerges from routinely collected administrative data and well-designed longitudinal and panel surveys. The Covid-19 survey (Understanding Society) indicates that the population prevalence of clinically significant levels of mental distress rose from 18·9% (95% CI = 17·8–20·0) in 2018–19 to 27·3% (95% CI=26·3–28·2) in April 2020, one month into UK lockdown.

However, the evidence from other studies is inconclusive. For example, another UK study showed a negative impact on general wellbeing – with people who have been made unemployed and with pre-existing disorders are those most at risk. Of interest, the proportion of people who experienced thoughts of death or self-harm remain relatively stable since lockdown but generally higher among younger people, those on lower income, and people with a diagnosed mental health condition.

Morbid and suicidal thoughts are also higher in people living alone and those living in urban areas.

Perhaps, surprisingly too, the prevalence of loneliness has remained constant since lockdown. However, evidence suggests that loneliness is reported as higher among younger adults, lower household income levels, pre-existing diagnosis of mental disorders, and people with children, and

people living in urban areas[v]. The same study showed that changes in the experience of abuse within the household has not changed.

Other research showed similarly inconclusive results. For example, a UK panel study with 3077 adults found that while suicidal ideation increased slightly over time, this did not translate into suicidal behaviour. Moreover, while symptoms of anxiety, and levels of defeat and entrapment decreased across waves; levels of depressive symptoms were constant and positive well-being increased. As with the UCL study, levels of loneliness did not change significantly over waves.

Subgroup analyses showed that women, young people (18–29 years), those from more socially disadvantaged backgrounds and those with pre-existing mental health problems have worse mental health outcomes during the pandemic across most factors. Again, these findings are based on non-randomised quota sampling from a panel study and therefore should be treated cautiously. Concerns persist about the long-term mental health impact of quarantine and disruption to education on young people. Again, the evidence is either unclear, poor or limited. Anxiety, depression, irritability, boredom, inattention and fear of Covid-19 dominate the psychological problems in children. Children with pre-existing behavioural conditions such as autism, Autistic Spectrum Disorder and attention deficit hyperactivity disorder (ADHD) appear particularly vulnerable to worsening symptoms.

Perhaps, a more reliable indicator for deterioration in public mental health is the use of psychotropic medication for common mental disorders. UK data suggests that the pandemic and lockdown has produced a significant surge in prescriptions for such medication[vi]. Linked perhaps, there was a 28% drop in referrals to the Improving Access to Psychological Therapies (IAPT) programme in the six months to the end of August 2020 while appointments for the most acute cases also dropped. Hospital attendances across 10 mental health, psychology and psychiatric categories fell by 9% in the seven months to the end of September while first appointments fell by 26%.

Other evidence suggests that **frontline medical workers** may be at risk of poor psychological outcomes as a result of Covid-19. Findings from previous pandemics and their associated quarantines, suggest that healthcare workers may develop post-traumatic stress disorder, depression, and substance use disorders.

Minority ethnic and migrant communities: Reports from Sweden specifically noted there was a higher Covid-19 death rate among migrant workers, who already often suffered from poor health and living conditions.[vii] A Finnish survey with immigrants[viii] also commented on the higher level of concerns about family and their financial situation in Finland, but also on concerns about family in the country of origin and the separation due to the pandemic. Universally, the pandemic appears to have exposed and exacerbated pre-existing health and social inequalities – viral infection and mortality rates are higher in minority ethnic populations. This phenomenon may be related to greater exposure in frontline working, overcrowding and higher levels of chronic health conditions, among other factors. The impact on the mental health outcomes of people from minority ethnic backgrounds is still to be determined.

Indigenous people: In Canada, many of the First Nations people were considered to be an 'at risk' group due to their remoteness, overcrowded living conditions and a lack of access to clean drinking water.[ix] In a more extensive report, the Arctic Council similarly noted how the effects of Covid-19 have exacerbated poor living conditions and crowded homes where running water and reliable and sanitary plumbing remain an issue.[x]

Domestic violence: There were reports from Northern Ireland[xi] (with wider reports from across the UK) and Canada[xii] of a rise in calls to domestic abuse helplines or to the police regarding interpersonal violence. Reports also note the effect of increased domestic violence on children and the risks, specifically to women in abusive relationships, in these situations. There was also evidence in Canada of an increased number of child welfare checks by police.[xiii] General mental health helplines in both Finland[xiv] and Canada[xv] reported higher volumes of calls, with the Crisis Canada helpline also noting a dramatic rise in 'active rescues'; calls where someone is considered to be at imminent risk of harm, and emergency services are contacted.

Lower-level effects of the pandemic and associated restrictions have also been recorded, where a degree of concern has been expressed that might arguably subside as restrictions are lifted. In a survey in Ireland,[xvi] for example, when participants were asked if they were concerned about household stress from confinement, nearly 60% responded 'somewhat'.

Certain groups are more at risk from mental ill health

Beyond the wide-angle lens view showing higher levels of anxiety and depressive symptoms, discomfort with the effect of restrictions, concerns for the future and some positive aspects to changes in lifestyle, some groups have been more affected than others.

Young people - There is evidence that changes in young people's routines, especially school closures and limitations in social spaces have sometimes resulted in overthinking, anxiety, depression and fear of the future. It might be said that the age group likely to 'go out' most, have been most affected by staying in. The picture is mixed, however. The young people's organisation in Ireland that noted a higher volume of calls to a young people's helpline, also found that many young people saw positives to being at home more and at school less.

Older people - Common across almost all countries was concern for older people who, because of their increased risk from Covid-19, have often become more isolated, resulting in increased loneliness, anxiety and depression for many. The information we reviewed suggested that the *extent* of the impact of the pandemic on the mental health of older people is, at this point, largely unknown. There is only anecdotal evidence (the higher rate of calls to a helpline, for example) to suggest the depth of need in this group. As with younger people, there are particularly vulnerable subsections -people with less of a support or social network, for example, or older people with specific medical needs who will significantly experience the disruption to regular healthcare services.

Healthcare staff - There is recognition of the likely effects of potentially traumatic work-related events (PTEs) common among frontline healthcare staff, nurses particularly. The reports reviewed note the need for psychosocial support for frontline personnel, such as CBT or psychological first aid, as well as general attention and support.

People with existing mental health conditions - There was a general assertion that the pandemic will worsen pre-existing mental health conditions due to disruption of daily routines, healthcare

services and raised levels of uncertainty about the future. In some cases, mental health services were considered to have been under resourced before the pandemic and there was an expectation that conditions of mental ill health would increase after the pandemic due to effects on the economy, the levels of isolation endured or bereavement, for example.

People with disabilities - The rapid review of services in Northern Ireland[xvii] noted the disruption of education and other day services to people with certain disabilities and their families. Families frequently rely on a range of practical supports, some of these were quickly withdrawn due to restrictions. The specific nature of the support and the high level of resources needed meant that resources at home could not compete with the resources in educational establishments especially. There was also a clear loss of interaction and engagement with others during periods of restrictions.

Single parent families - The rapid review of services in Northern Ireland[xviii] also commented on the effect of the pandemic on single parent families. In Northern Ireland, in 91% of single families, the parent is female. Food and housing insecurity are key problems for low-income and single parent families, which have been exacerbated by the loss of available work during the pandemic.

It is worth noting that **adult men** are at higher risk for social isolation/loneliness, psychological distress and self-reliance, that is they are reluctant to seek help from others or to use mental health services. Previous suicide studies from a range of countries found that middle-aged men within particular sectors, such as the building trade, had the highest suicide rates; thus, men tend to be more impacted by economic downturns and loss of employment than women. The long-term economic impacts of the pandemic have still to be realized and therefore, we would expect mental illness and suicide rates to increase in the next five years.

Positive aspects of the restrictions

The surveys considering lifestyle changes often had a mixture of results. For example, a Norwegian survey showed that while physical exercise decreased for some, it increased for a greater number.[xix] The CSO survey in Ireland found that while alcohol intake had risen for some, for an approximately equal number it had fallen.[xx] There is also evidence the restrictions, and working from home particularly, had benefits. A Finnish workforce survey[xxi] found the increase in remote

working brought about less commuting time and an increase in family time, as well as other positive changes.

The NISRA survey in Northern Ireland found that 62% of participants said they enjoyed more quality time with the people they lived with.[xxii] A survey with young people in the Republic of Ireland[xxiii] noted some of the benefits of the restrictions were considered to be more quality family time and less pressure not being in school/college, as well as the avoidance of long commutes and being able to enjoy the comforts of home more.

Innovation and good practice

As far as possible we sought to find examples of innovation in response to the pandemic's impact on mental health, however, this was difficult. A clear theme emerging from this work is that certain needs, evident before the pandemic, have been exacerbated by it. Our review confirms that there is no uniform approach to supporting people's use of ICT across the NPA countries. However, we believe that those areas which might be best characterised as remote and rural, covering a sparsely populated geographical area where access to health and social care services is limited, have been much better prepared for the pandemic. Arguably perhaps, the populations in these areas are more psychologically acclimatised and accepting of restrictions and solitude. Compared with more populated areas with greater service access and provision, the interviews with municipal bodies and public health agencies highlight a much lower level of disruption to normal social activities and service provision. In brief, a much greater resilience to the pandemic. However, structural barriers such as broadband access and installation costs remain in many parts of the NPA region and we know that older populations are more likely to experience 'digital exclusion'. However, government investment in broadband access has greatly improved and will continue post-covid.

In more populated areas digital and internet-based products have long been available but are not commissioned by services on the grounds of cost, even though there is a strong cost-benefit rationale for their use (e.g., health monitoring, illness prevention and early intervention). This level of resistance seems untenable now, and policy must shift rapidly towards resilience and autonomy in individuals and communities.

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In this context, three aspects of adaptation or innovation have emerged for comment:

I. Focussed mental health guidance

Evidence from six countries (Finland, Norway, Ireland, Northern Ireland, Canada and the Western Isles) indicate the need for online mental health guidance being tailored to the specific effects of the pandemic, particularly anxiety about Covid-19 itself, or the impact on wellbeing from the restrictions or isolation (dealing with emotions, maintaining a healthy lifestyle, making contact with others etc).

In most cases this was general advice about wellbeing, in other cases there was detailed advice for specific groups, for example the Irish Health and Social Care web pages on mental health with regard to the pandemic were broken down for young people and older people, while also looking at bereavement and grief.[xxiv] Specific information has also been made available for the First Nations in Canada.[xxv]Some web sites go further than simply advice. For example, Wellness Together Canada's web site encourages people to take positive steps for their own wellbeing and provides immediate text support; information and videos on common mental health issues; mental wellness programs that can be completed individually or with coaching; monitored communities of support; and individual phone, video, and text counselling.[xxvi] . It is again important to note that we have no evidence for the effectiveness of such psycho-educational programmes. We were unable to locate any programmes with evaluation components.

ii. Support to minority ethnic and migrant communities

A Finnish survey on the effects of the pandemic on migrant communities[xxvii] noted that participants who had engaged with integration programmes worried less and there were lower incidences of mental ill health. While these programmes were not created in response to the pandemic, they are an example of a practice which might mitigate its effects.

In Sweden efforts have been made to overcome language and cultural barriers in order to ensure migrant communities have access to information about Covid-19. Well known music artists have

been asked to spread key information via social media about the seriousness of the virus pandemic.[xxviii] A separate web site initiative helped communicate information through shareable posters and videos to migrants in their own language.[xxix] This perhaps underlines the importance of relevant community support and trusted community-based sources of information, of which there are other anecdotal examples – again, this is an area that could be further investigated.

iii. A move to more digital connection

With social distancing, various limits on the number of people who can gather together and greater isolation, it is unsurprising there has been a variety of different developments around the means of connecting people in different contexts. There is evidence in five countries (Sweden, Norway, Western Isles, Canada and Iceland) of digital technology being used to securely connect clients to a healthcare resource, either an online programme or a healthcare professional. In Sweden, for example, the use of digital welfare technology in the Skellefteå municipality has accelerated. Digital consultations increased dramatically in the period May - November 2020, from three consultations per month initially to 37 consultation per month.[xxx] Similarly in Canada, a study into the lockdown effects of the pandemic on residents in long term care examined the use of the interRAI facility to record clinical observations and assess the care of frail older persons.[xxxi] The facility was able to examine changes in resident outcomes over time and evaluate strategies put in place to mitigate negative outcomes.

A range of online programmes are currently being used by the National Health Service in the Western Isles.[xxxii] These include Sleepio (an online sleep improvement programme based on cognitive behavioural therapy), SilverCloud (which provides access to a number of online mental wellbeing programmes) and Beating the Blues (an online CBT based learning programme for coping with depression and anxiety) all of which are overseen by a Community Navigator who monitors and reviews a client's progress, and provides feedback, guidance and encouragement, via regular written and/or phone reviews. Five Komp devices,[xxxiii] that make it easier for people to connect to family and healthcare professionals, are currently in use, with the hope more will become available. In the new year, the WHZAN[xxxiv] suite of devices will be introduced to two residential care homes. The devices gather medical information about a client and inform a tablet, which then updates an online dashboard which securely displays the case load. This information

can highlight if someone is at risk of falls, malnourished, or at risk from infection. This is particularly helpful for remote places such as the Western Isles as doctors can then assess if they need to call out to see a patient face to face, often requiring long distances to travel.

Other aspects of connection include the development of online chat or helpline services, as well as the adaptation of mental health or personal development/employability services to an online footing. Based on the work we reviewed so far on the use of these kinds of digital tools it would seem this has been most accelerated in the places where there was already acceptance of the use of digital tools to some extent. Again, this would be another useful area of further investigation.

Summary

Making sense of the mental health and wellbeing impacts has been challenging for various reasons. First, the spread of the pandemic across European countries, including the NPA region has not been uniform. Indeed, even within-country areas, the incidence and subsequent mortality rates of Covid-19, have been extremely different with considerable fluctuations over the past 9 months. Second, there are considerable variation in government policy towards quarantine and human restriction and these appear to be determined within countries, at times, by shifting public opinion and political popularly rather than the epidemiological evidence and behavioural science. Third, while the breakdown in mental health across all sectors has not happened in the way that some experts and media commentators have predicted, it does seem likely that mental health has deteriorated for some groups and will continue to do so over time.

It is important that we acknowledge here, the absence of robust evidence. The best available information points to a deterioration in wellbeing but scant indication of an increase in diagnosable psychiatric conditions. Normal running of psychiatric services in which patients are seen face-to-face has ceased in most areas and we have no data on emergency admissions. A predicted increase in suicide has also failed to materialise in the early months of the pandemic. This may change as the early protection given through social solidarity begins to wane and the longer-term social and economic effects of Covid-19 sink in.

It is also worth pointing out that the evidence for a more negative impact on mental health appears to be on urban populations where the social structures and economies are dramatically different to those of rural communities in sparsely populated areas where isolation, self-reliance and 'social distancing' are the norm. In these areas, work and social life are not wholly dependent on external service provision and public transport is invariably rare. Moreover, municipal bodies and public health agencies in remote and rural communities can be seen as exemplars, leading the way in the use of e-health, providing personal and social services through a range of digital platforms.

However, our public health experts working in remote and rural areas also sought to underline the point that while common urban-rural differences may exist across national borders, rural differences exist *between and within* countries and regions too. Thus, some rural areas are more affluent and well-resourced. In others, particularly those areas with large minority ethnic and indigenous populations which have a long history of structural disadvantage and marginalisation, have significant bbarriers to utilization of eHealth across many small villages and communities. Thus, the lack of Internet access or coverage is commonplace, as is a lack of access to electronic devices. As our Canadian expert has highlighted, there may be very low levels of literacy in general. For example, in New Brunswick, more that 60% of the population cannot read, write or type on a keyboard.

Recommendations

As the pandemic continues and restrictions are implemented and relaxed in cycles, and as vaccines begin to be rolled out, it is clear that mental health and wellbeing in each country, as well as responses to it, are still in a state of flux and the research base continues to evolve. Based on our work from the initial stages of the pandemic, we would make the following recommendations for further research:

1. More work is needed to gather robust evidence on the impact of the pandemic on all elements of society and the individual groups noted in this project. Our thematic review suggests there are many research questions we could not robustly answer and the fluid nature of the pandemic and countries evolving response to it, means that any work is likely to reflect a snapshot of the situation at that time. More detailed long-term research is needed around key questions to fully understand the impact of the pandemic. Any longer-term studies need to be careful to regularly collect data and be conscious of the context and the possible longer-term impacts.

2. The rise of digital services in response to service users is a particular area of interest. More work is needed to understand how to encourage their adoption and establish what works well / less well in terms of form and approach. This research could be rolled into the development of new services as growth accelerates in areas with less digital expertise / infrastructure.

3. The power of community and the use of trusted community support to provide comfort as well as deliver services, should also be a particular area of work. While leadership in the statutory and the voluntary & community sector organisations are often fully supportive of digital healthcare, implementation has not been realised at the service provision and community levels

4. In many areas, clinical and voluntary staff are not routinely trained in using telehealth and lack confidence and competence in using it. Maintaining people with mental and neurodegenerative conditions in their own homes for as long as possible is crucial but compels a systemic approach that optimises readily available technology, connecting them to family, community and professional and specialist services (statutory and voluntary).

5. Areas already advanced in their use of technology before the pandemic (such as the Western Isles / Scandinavian countries) seem to have been able to more easily expand these services. Studies to consider the long-term impact of these services could shed light on the extent to which they protect mental health.

References and other sources of information

[i] Key statistics drawn from initial writing of country reports in mid-November 2020

[ii] COVID-19 pandemic: possible consequences on public health, Public Health Agency of Sweden Report, June 2020: https://www.folkhalsomyndigheten.se/publicerat-material/publikationsarkiv/c/COVID-19-pandemins-tankbara-konsekvenser-pa-folkhalsan/?pub=76637

[iii] https://yle.fi/uutiset/osasto/news/thl_chief_concerned_about_impact_of_crisis_reporting_on_finlands_mental_health/11535961

[iv] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7471570/

[v] Fancourt, D., Bu, F., Mak, H.W., Steptoe, A. (2020) Covid-19 Social Study Results Release 11 , Department of Behavioural Science & Health

[vi] https://www.theguardian.com/society/2021/jan/01/covid-antidepressant-use-at-all-time-high-as-access-to-counselling-in-england-plunges

[vii] Swedish policy analysis for COVID-19, Elsevier Public Health Emergency Coalition, August 2020. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7455549/

[viii] https://mieli.fi/sites/default/files/inline/materiaalit/Mios/report_covid19_and_mentalhealth_of_immigrants.pdf

[ix] Meghan McMahon, Jessica Nadigel, Erin Thompson, and Richard H. Glazier (August 2020) 'Informing Canada's Health System Response to COVID-19: Priorities for Health Services and Policy Research.'

[x] https://arctic-council.org/en/news/the-coronavirus-in-the-arctic-spotlight-on-mental-health/

[xi] Mulholland C., Duffy M., Blair C., Macpherson M., Potter C., McManus J., Kane J., Dyer K., Hamilton G., O'Neill S., Bowes H., Edwards R., Hanna H., and Barrett S.L. (July 2020). 'The Mental Health Impact of the COVID-19 Pandemic in Northern Ireland: A Rapid Review.' Department of Health, Northern Ireland.

[xii] https://www.ctvnews.ca/canada/police-calls-for-domestic-violence-mental-crises-rise-during-pandemic-1.5088113

[xiii] Ibid.

[xiv] https://www.helsinkitimes.fi/finland/news-in-brief/18246-finland-could-face-a-mental-health-crisis-even-after-the-pandemic.html

[xv] https://www.ctvnews.ca/health/coronavirus/as-COVID-19-stress-builds-study-warns-of-potential-spike-in-suicides-1.4968581

[xvi] https://www.cso.ie/en/releasesandpublications/ep/p-covid19/COVID-19informationhub/socialandwellbeing/socialimpactofCOVID-19survey/

[xviii] ibid

[xix] https://sciencenorway.no/covid19-exercise-mental-health/researchers-found-higher-level-of-anxiety-and-depression-in-people-who-exercised-less-during-covid-19-lockdown/1712240

[xx] https://www.cso.ie/en/releasesandpublications/ep/p-covid19/COVID-19informationhub/socialandwellbeing/socialimpactofCOVID-19survey/

[xxi] https://www.ttl.fi/en/slight-increase-in-well-being-at-work-during-the-coronavirus-spring/

[xxii] https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/NISRA%20COVID-19%20Survey%20Key%20Findings.pdf

[xxiii] How's Your Head - Young Voices During COVID-19 (October 2020) Report of a national consultation with young people on mental health and wellbeing

[xxiv] https://www2.hse.ie/wellbeing/mental-health/COVID-19/minding-your-mental-health-during-the-coronavirus-outbreak.html

[xxv] https://www.afn.ca/coronavirus/

[xxvi] https://ca.portal.gs/?lang=en-ca

[xxvii]
https://mieli.fi/sites/default/files/inline/materiaalit/Mios/report_covid19_and_mentalhealth_of_immigrants.pdf

[xxviii] https://www.svt.se/kultur/medier/cherrie-det

[xxix] https://vardgivarguiden.se/utveckling/2019-ncov/trycksaker-etc/

[xxx] Information supplied by Maria Pahlberg, Researcher/Developer at Development Unit, Skellefteå Municipality

[xxxi] McArthur C, Saari M, Heckman G A, Wellens N, Weir J, Hebert P, Turcotte L, Jbilou J & Hirdes J P (October 2020) 'Evaluating the Effect of COVID-19 Pandemic Lockdown on Long-Term Care Residents' Mental Health: A Data-Driven Approach in New Brunswick'

https://www.sciencedirect.com/science/article/pii/S1525861020309154?dgcid=coauthor

[xxxii] https://www.wihb.scot.nhs.uk/psychological-and-social-wellbeing-in-the-western-isles-new-ways-of-coping/

[xxxiii] Ibid.

[xxxiv] https://www.whzan.uk/care-homes