

PS03/21

Our planet's climate and ecological emergency

May 2021

POSITION STATEMENT

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Executive summary

The disruption to life posed by climate and ecological degradation is a crisis which presents an unprecedented threat to human health. This position statement is the Royal College of Psychiatrists' (RCPsych's) 'planetary diagnosis' of the ongoing climate and ecological crisis in which we outline 'treatments' that are achievable by our College. To promote the importance of immediate, radical action to address these issues, the College is declaring a climate and ecological emergency.

This statement adopts the WHO's stance on health – that it should be defined by a complete state of physical, mental and social wellbeing, not just an absence of disease (WHO, 2018).

Humanity is part of the natural world and we therefore have a responsibility to the creatures and habitats that make up its ecosystems. If we and future generations are to remain well, we all have an obligation to ensure that our actions reflect this responsibility.

Increasing rates of climate-related hazards are exacerbating existing mental health problems and leading to psychological distress and the onset of new episodes of mental illness (Beaglehole *et al*, 2018). As healthcare professionals, part of our response must involve advocating for our patient groups, as people with mental illness are especially vulnerable. We therefore need to champion a model of mental healthcare that is protective and preventative rather than reactive. Our role in joining other health professionals to demand action on the climate and ecological emergency is non-negotiable.

This statement comprises:

1. Pledges of action by RCPsych
2. Recommendations for action by government, educational bodies and health services
3. Details of the impacts of environmental degradation and climate-related hazards on mental health
4. An overview of psychological dimensions of the crisis
5. Ways in which mental health services can form a part of the solution.

This statement provides a platform from which we, the College, and our members can lead by example in showing that sustainable practice in mental health services is not only possible but exciting and necessary to our futures. Recognising the critical role of government and NHS leaders, it also carries a message of encouragement that they work with us to bolster actions to mitigate climate and ecological degradation, whilst simultaneously promoting good mental health.

Key messages

Climate change, pollution and biodiversity loss:

- have created a health crisis and it is imperative that psychiatrists are informed about it and actively engaged in these issues.
- are interconnected factors which individually and collectively have a profoundly destructive impact on human and planetary health. Our actions and their impacts will be inherited by the generations to come.
- have particular implications for mental health and disproportionately affect vulnerable groups, including persons with pre-existing mental illness and children.

A sustainable and positive vision of mental health services will require a greater understanding, adoption and integration of preventative principles and interventions. This preventative ethos must be placed at the heart of healthcare:

- The NHS is a major contributor to carbon emissions – in England it accounts for 4–5% of the total (NHS England 2020a).
- Improving NHS sustainability cannot be achieved merely through rationalising estates, it must involve a more holistic approach to health creation, health protection, and a model of healthcare where prevention is prioritised by services.
- Detecting and treating illnesses early to halt or slow their progress can reduce relapses, and prevent patients deteriorating to the point of needing hospitalisation; this approach increases efficiency and is an essential part of making healthcare more sustainable.
- Preventative healthcare is not an alternative that will undermine medicine, but rather champions wellness and seeks to mitigate the incidence and progression of illnesses where possible.

The Royal College of Psychiatrists' pledges

- Commit the College to an ambitious plan for sustainability, including a pledge that by 2040, it will achieve net-zero carbon dioxide levels for emissions it directly controls.
- Promote prevention in psychiatry, showing how detecting and treating illnesses early to halt or slow their progress is an essential part of making healthcare more sustainable.
- Integrate this work throughout the College to develop a wider sustainable network and promote learning.
- Support the creation of an alliance across mental health organisations to better represent the mental health impacts of, and potential solutions to, the climate and ecological emergency.
- Empower patients to make informed choices in their care and engage them in the development of mental health services that are collaborative and sustainable.
- Continue supporting the integration of social prescribing and nature-based care into mental health services.

Recommendations

For NHS organisations across the UK:

- Every NHS health organisation, commissioner and provider to produce a Green Plan by the end of 2021.
- Mental health provider organisations should develop and implement a biodiversity action plan which examines ‘greening (incorporating more environmentally friendly systems) of estates, buildings and care pathways, and establishes links with green care providers.
- Establish a natural services network to map all sites in their local area that provide opportunities for sustainable interaction with nature and/or activities that preserve the natural environment and promote these to mental health services.
- Incorporate the goals of [Choosing Wisely](#) into daily practice, including:
 - Encouraging doctors to provide patients with resources that increase their understanding about potential environmental harms of biomedical/ pharmaceutical interventions and help them understand that doing nothing or fewer interventions can sometimes be the best approach.
 - Encouraging and empowering patients to ask questions such as, “Do I really need this test or procedure? What are the risks? Are there simpler safer options? What happens if I do nothing?”
- When fully established in England, all Integrated Care Systems (ICS) to appoint a social prescribing lead to oversee all community teams developing a social prescribing function to identify local opportunities for complementary health improving activities with similar initiatives across the Devolved Nations, including the Integrated Joint Boards in Scotland.
- Commissioners to embed social prescribing into community and inpatient mental healthcare and not limit this treatment option to primary care.
- Expand the NHS sustainability awards. Continue recognising sustainable clinical work across the NHS with consideration towards developing an additional award for the work of mental health services in achieving a high standard of sustainable practice.
- Governing NHS bodies across UK to jointly develop a minimum set of standards for providers in developing sustainable services.
- Commissioners to include these minimum standards in their contracts.
- Commissioners to develop a sustainable mental health service toolset: Provide a working set of standards by which mental health services can develop effective sustainable development plans which reflect the need for estates and clinical staff to work collaboratively when developing and delivering sustainable mental health services.

For medical education, academic and research organisations:

- Research organisations to ensure that future research in planetary health includes multidisciplinary studies examining how the mental health of different vulnerable groups are affected by climate-related hazards, pollution and biodiversity loss.

- Research organisations to establish and quantify the co-benefits to mental health of taking action against climate change, biodiversity loss and pollution.
- Medical School Council to ensure the impact of the climate and ecological emergency, and the role medical professionals can play in preventing and mitigating this, are a core part of curriculum.
- Medical School Council to work with medical schools to ensure students are taught about overuse of tests and interventions.
- Organisations responsible for postgraduate and continuing medical education should ensure that practising doctors receive similar updates to undergraduates.

For UK Government:

- To prioritise a unified approach with sufficient resources to tackling the climate and ecological crisis across all aspects of government.
- To establish an authority that can lead on public mental health and preventative healthcare, tackling social determinants of mental health early.
- Follow the [UKHACC Principles for a healthy and green recovery](#) to place environmental and health factors at the heart of any economic recovery following the COVID-19 pandemic.
- Base decisions on changes to land and water usage on tools which include assessment of prospective impacts to mental and physical health.

The Royal College of Psychiatrists' work to tackle the crisis

We are committed to becoming an organisation that is actively working to tackle the climate and ecological emergency, whilst promoting the sustainability of mental health services. So far, we have divested from all fossil fuel in accordance with our commitment to ethical investments and re-invested in a portfolio that promotes the United Nations Sustainable Development Goals. This year, we will adopt a strategy outlining our approach to social, environmental, economic and organisational sustainability and how it is measured across College activities.

This year, our ambitious College sustainability strategy will:

- Begin with the declaration of a climate and ecological emergency.
- Show how the College will reach net zero for those emissions it directly controls by 2040, in line with the Greener NHS plan.
- Establish a baseline for the College's current environmental impact.
- Measure, monitor and report progress on the plan.
- Commit to represent and advocate for the links between mental health and the ecological emergency.

This work will be integrated across the College to develop a wider sustainable network and promote learning on the climate and ecological emergency by:

- Establishing a Start and Finish Group to work across the College which coordinates the College's sustainable transition.
- Embedding sustainability in College quality improvement activities, faculty accreditation and accreditation schemes.
- Organisation of College functions and conferences to adopt sustainable event planning guidance of the highest and most recent standard.
- Developing a Champion role for the climate and ecological emergency within each of our faculties to promote engagement across psychiatry.
- Supporting the College in the Devolved Nations to develop ambitious responses to the climate and ecological emergency that are relevant to their health services and jurisdictions.
- Embedding principles of sustainable mental health care and the impact of the climate and ecological emergency in the curricula by 2022.
- Building on the Green Scholar and Sustainability Scholar roles.

Advocate for action by government, NHS leaders and research bodies to promote sustainability and tackle the climate crisis by:

- Reaching across the mental health sector to further public and governmental understanding of the wide-ranging health impacts of the climate and ecological crisis, with emphasis on how they relate to mental health.
- Using the College's networks to lobby Government and the NHS on policies and decisions which do not adequately acknowledge the mental health consequences of the climate and ecological emergency.
- Encouraging research funding bodies to promote work highlighting the mental health impacts of the climate and ecological emergency.

Collaborate with other partners in mental health by:

- Supporting the creation of an alliance across mental health organisations to better represent the mental health impacts of and potential solutions to the climate and ecological crisis and the integral role healthy nature plays in our wellbeing.
- Collaborating with partners to develop actions which coincide with COP 2026.

Engaging with members, patients and carers across the UK and internationally to develop awareness of the climate and ecological crisis as a mental health crisis. This will involve work on:

- Promoting prevention in psychiatry by recognising and responding to the social and environmental determinants of mental ill-health. Integrating a public mental health perspective throughout the College to promote sustainable psychiatric practice.
- Promoting guidance for healthcare providers to support them to develop and evolve services so that they fit in with the NHS pledge to have net-zero carbon dioxide emissions by 2040.

- Prescribing guidance: medications and their prescribing have a substantial carbon footprint. There are sustainable forms of prescribing which can markedly reduce the carbon footprint of a patient's care without impacting on quality of care.
- Promoting ways we can empower patients to make more informed choices in their care as outlined in the Choosing Wisely campaign and to encourage patients to assist in the development of mental health services that are more collaborative and sustainable.
- CPD development through the creation of educational resources for members to support their understanding of the impacts of climate change on mental health and mental health services.
- Providing international members with increased online support to help promote sustainable mental health provision around the world.
- Engaging with patients and carers to help them play a part in designing new, sustainably focused health services.
- Including and involving the voices of young people, encouraging a sense of agency in how their future is to be determined, promoting self-esteem and resilience.

Introduction

“The eyes of all future generations are upon you. And if you choose to fail us, I say – we will never forgive you.”

– Greta Thunberg, UN Climate Summit, New York, 23 September 2019

Around the world, climate change and environmental degradation are resulting in major impacts on human health and an unprecedented loss of biodiversity. Human populations are already experiencing the health effects resulting from more severe storms, floods, air pollution, wildfires and droughts; whilst food insecurities, extinction events and loss of habitats are altering how and where people live. These changes are being experienced disproportionately in the Global South, but are increasingly tangible elsewhere, including in the UK.

A global campaign calling for action against climate change in 2019 led to worldwide demonstrations by children and young people. Such protests highlight that the consequences of inaction will most profoundly affect the youth of today. Meeting their urgent demand to adopt sustainable ways of living is necessary to secure a healthy and prosperous future for them, for generations to come and for the planet.

The incredible progress made in healthcare will be compromised without focused, collective action over the next decade. The health sector has a key role to play in the mitigation of climate change and other environmental threats. Tackling these threats requires a positive vision of the future in which restoration of our relationship with the natural world is linked to improvements in human health and wellbeing. This logic is articulated by The Lancet’s 2019 report on the Climate Countdown (Watts *et al*, 2019) which states that “placing health at the centre of this transition will yield enormous dividends for the public and the economy, with cleaner air, safer cities, and healthier diets”.

In October 2020, despite being in the midst of fighting the COVID-19 pandemic, the NHS became the first world’s first national health system to commit to becoming ‘carbon net zero’. Chief Executive of the NHS in England, Sir Simon Stevens, acknowledged that 2020 had been dominated by COVID-19 and was the most pressing health emergency facing us, but added that “undoubtedly climate change poses the most profound long-term threat to the health of the nation” (NHS England and NHS Improvement, 2020b).

The COVID-19 pandemic has taught us the following lessons, which we must bring forward if we want to overcome climate change and ecological collapse:

- 1** Global health crises exacerbate existing inequalities – those who are already disadvantaged are often most affected (Raju *et al*, 2020; Kluge *et al*, 2020; Corburn *et al*, 2020).
- 2** Our mental and physical health is inextricably linked with the health of the natural world (IPBES, 2020).
- 3** Large-scale public health crises can lead to swift, effective and collaborative change.

A tremendous effort by national and international organisations to tackle the dual threats of climate change and ecological degradation is already under way. UK, global and international frameworks of action, including the UK Government's Climate Change Act; the United Nations' Sustainable Development Goals; Conference of Parties (COP); Convention on Biological Diversity; United Kingdom Health Alliance on Climate Change (UKHACC) and NHS plan for delivering a net-zero NHS. However, without concerted collective pressure and effort, these organisations and frameworks will not achieve their goals.

Section 1: Mental health impacts

There is increasing evidence of both direct and indirect impacts on mental health from the climate and ecological emergency (Berry *et al*, 2018; Hayes *et al*, 2018). Climate change refers to changes to the weather from rising global temperatures due to use of carbon-based fuels, whilst the ecological crisis describes how changes in land and water usage are degrading the natural world. Although these problems are interconnected, each has their own research background and there are differing implications for mental health.

1A: Climate change and air pollution

Changing climate is exacerbating existing mental health problems and leading to psychological distress and the onset of new episodes of mental illness (Beaglehole *et al*, 2018). In addition, extreme weather events damage health infrastructure, and impact upon the functioning of health and social systems (IPCC, 2014). Heat waves, cyclones, floods, hurricanes and droughts are all increasing in frequency and severity as a result of human-induced climate change (IPCC, 2014). These events, when combined with sea-level rise, wildfires and land use change all contribute to livelihood losses, uncertainty and, in the longer term, forced migration.

Floods

Flooding is the most commonly recorded extreme weather event, both in the UK and globally, with flood events increasing in frequency and severity as a consequence of climate change (Met Office, 2021). The mental health effects of floods are significant, with one UK study of flooded households showing that 20% of participants who had been flooded had probable depression, 28.3% had probable anxiety and 36% had probable PTSD at one year (Waite *et al*, 2017). Follow-up studies of this cohort have continued to show a persistently elevated prevalence of these mental disorders several years later (Mulchandani *et al*, 2020).

Another study of 30 locations in England and Wales that conducted interviews with residents affected by flooding found that psychological impacts were more commonly reported than physical effects (Tunstall *et al*, 2006). Further, the prevalence of mental health symptoms (psychological distress, anxiety and depression) has been found to be two to five times higher among individuals who reported flood water in the home compared to non-flooded individuals (Paranjothy *et al*, 2011).

The adverse effects of flooding on mental health have been documented in many studies across the world (Fernandez *et al*, 2015). This indicates that the predicted increase in flood events in the UK and beyond will undoubtedly negatively impact on the mental health of those involved.

Cyclones, hurricanes and storms

Coastal storms, such as tropical cyclones, are predicted to become more severe as climate change progresses (IPPC 2014). Severe storms are recognised to have substantial adverse impacts on the mental health of affected residents and disaster-relief responders (Lane *et al*, 2013) and people with pre-existing mental disorder experience worse psychological outcomes when exposed to such climatic events (Hayes *et al* 2018). Widespread damage to property, livelihoods and displacement all play a role in the adverse impacts on mental health. These impacts are predicted to become more marked in coming decades, with 13% of the world's urban population living in vulnerable, low-lying coastal regions and further coast-ward migration predicted (IPPC 2014). As with other climate-related hazards, women may experience particularly adverse effects on their mental health (Ayeb-Karlsson, 2020a).

Droughts

Droughts are increasing in severity and frequency as climate change accelerates. A recent systematic review identified those particularly at risk of adverse mental health effects from drought to include women, adolescents, people of lower socioeconomic status, the elderly and farmers (Cianconi, 2020) who may show feelings of distress and helplessness (Padhy, 2015).

Currently, the majority of available evidence is relevant in a global context, rather than being specific to the UK.

Wildfires

Recent large-scale wildfires in Siberia, the Amazon, North America and Australia have all focused attention on the devastating impact that wildfires can have on ecosystems. In addition, there is increasing evidence of the adverse effects on health, including mental health when these fires occur near human settlements (Cianconi, 2020; Laugharne, 2011; Belleville, 2016). Adverse outcomes such as PTSD, depression and substance misuse have the potential to become long-lasting in the aftermath of wildfires (Bryant *et al*, 2019).

Heat

The average temperature in the UK during the most recent decade has been on average 0.9°C warmer than the 1961–90 average, and all of the top ten warmest years for the UK since 1884 have occurred since 2002 (Met Office, 2019). According to the IPCC, the frequency and severity of heat waves is predicted to continue to increase in the UK and most other land regions (IPCC, 2018). A systematic review has established firm evidence

of an association between heat and suicide and also for increasing mental health service use during hot weather (Thompson *et al*, 2018). In addition, mortality has been shown to be higher during hot weather in people with mental illness (Page *et al*, 2012) and psychiatric symptoms appear to be exacerbated in patients being nursed in hot buildings (Tartarini *et al*, 2017). There is also emerging evidence that emergency attendances and psychiatric admissions increase during hot weather (Basu *et al*, 2017). Among general populations, it seems that unusually high temperatures are linked to worsening mental health (Obradovich *et al*, 2018; Noelke *et al*, 2016).

Air pollution

There is evidence of an association between long-term exposure to air pollution and depression and anxiety as well as a possible association between short term exposure and suicide (Braithwaite *et al*, 2019) and dementia (Chen *et al*, 2017). Evidence on this area is still limited and associations have not been studied over the lifetime of the participants and causation has not been directly proved.

Insecure food systems

The IPCC report on climate change shows that “observed climate change is already affecting food security through increasing temperatures, changing precipitation patterns, and greater frequency of some extreme events” (Mbow *et al*, 2019). There are 135 million people across the world experiencing food insecurity which, unsurprisingly, given its potentially destructive effects on nutrition and livelihoods, has been shown to be independently associated with higher levels of psychological distress, psychiatric illnesses and impaired childhood development (Melchior *et al*, 2009; Sorsdahl *et al*, 2011; Jacka *et al*, 2011; Carter *et al*, 2011).

1B: Biodiversity loss

We are currently in the midst of what has been described as the 6th mass extinction (IPBES, 2019). An average of 25% of species across plants and animals are under threat, with a global rate of species extinction that is tens to hundreds of times higher than that averaged over the past 10 million years (IPBES, 2019). This trend can also be seen in the UK with an accelerating decline in species diversity and abundance in species since 1970 (IPBES, 2019). These are losses which are not fully replaceable and indeed some are irreplaceable.

Biodiversity is a term which in the broadest sense describes all of life on earth. It is a central part of what we think of as nature and is closely related to concepts such as Mother Earth, biosphere and ecosystems (IPBES, 2019). The sum total of the plants, animals and microbes, both on land and in water, have an inherent value which deserve our stewardship in its own right.

However, this web of life is also the source of resources which we are entirely dependent upon including “breathable air, fertile soil, productive land, bountiful seas and an

equitable climate” (Millennium Ecosystem Assessment, 2005). Beyond these most basic needs nature is described as underpinning “all dimensions of human health and contributes non-material qualities of life – inspiration, learning, physical and psychological experiences, supporting identities – that are central to quality of life and cultural integrity even if their aggregated value is difficult to quantify” (IPBES, 2019). Our health is completely entwined with that of all life on earth.

Nature and mental health

Such are the impacts to our way of life that the threat to biodiversity should concern all health-care professionals. However, the therapeutic benefits of nature and the importance of healthy natural environments to wellbeing highlight why psychiatry has a specific role to play. There is clear evidence that healthy environments and contact with nature are important for our mental health (IPBES, 2019). Simultaneously, our clinical work has potentially detrimental effects to nature which we are accountable for and should look to mitigate, such as the impact of the pharmaceutical industry on the environment (HCWH, 2018).

We are part of nature so what is good for nature is good for us. Concepts such as biophilia, a need for nature, ecopsychology and nature-connectedness highlight how much we depend on the health of our natural environment. The causal links underlying the positive impact of nature on our wellbeing are not fully understood but is believed to involve our stress pathways (Hartig *et al*, 2004). It is also recognised that nature’s impact for many is mediated by a spiritual connection to the natural world (Irvine *et al*, 2020).

Natural solutions for mental health

Appreciating the close relationship between nature and our mental health opens up solutions to build a model of health care that is sustainable, focused on prevention and has co-benefits for our planet. It has been recommended that a central part of the UK’s 25-year environmental plan should include the integration of green spaces into mental health care (HM Government, 2018). There is already relevant work in this area, which could help with this recommendation including the growing importance of social-prescribing and green care.

These frameworks provide treatments which are helpful for people suffering from mental illness (IPBES, 2019). Moreover the wider inclusion of nature at a population level also has important implications for public health, including reducing social inequality (Mitchell *et al*, 2015). Finally, many nature-based solutions in mental health care have important co-benefits including enhanced nature connectedness as well as protecting our environments. These are all reasons to join and advocate for a health service that is not only sustainable but natural (Wildlife and Countryside Link, 2020).

1C: Forced migration and vulnerable populations

Representing the full impact of the planetary crisis on mental health is challenging. The changing climate is causing instability to land use and access to resources; this in turn can lead to forced migration and armed conflict, which have profound impacts on people's health.

Migration and 'trapped' populations

The UN High Commission for Refugees (2020) describes climate change as exacerbating and creating increasingly complex emergencies. They also estimate that there were 79.5 million forcibly displaced people in the world by the end of 2019, of these 23 million were refugees and 50.8 million were internally displaced (i.e. displaced within their own country's borders) (IDMC, 2020).

People migrate for a variety of reasons, including environmental ones (Black *et al*, 2011). Moreover, climate change not only pushes people to migrate, but can create 'trapped' populations' – people unable to leave environmentally risky locations despite wanting to (Ayeb-Karlsson *et al*, 2018). Climate change also creates indirect pressures for migration by instigating armed-conflicts (Government Office for Science, 2011).

Climate-induced mobility and immobility can lead to various wellbeing impacts including stress, anxiety, depression, and PTSD (Government Office for Science, 2011; Schwerdtle *et al*, 2018; du Bray *et al*, 2017). Rural–urban migration, for example, may lead to people facing non-economic losses (UN, 2013) such as loss of belonging through the sense of a place and home, loss of inter-generational livelihood activities, local identity and thereof reduced wellbeing (Ayeb-Karlsson, 2020b; Gibson *et al*, 2019). People migrating to cities also often move to slums or informal settlements (Ayeb-Karlsson *et al*, 2020). In this way, the new urban life may introduce them to dangerous living and working conditions that can result in injuries, health issues or indebtedness that may push people towards substance-use and criminal activities (Ayeb-Karlsson *et al*, 2016).

Much climate-induced migration is internal, but when migration is further afield it can cause psychosocial malaise as people displaced can face stressors associated with xenophobia and racism (Gleick, 2014), albeit that migration can also support psychosocial resilience by fostering hope and belonging for refugees in countries where they feel welcomed (Siriwardhana & Stewart, 2013). Nevertheless, migration is associated with increased rates of stress, PTSD and anxiety (Gleick, 2014) and there is also evidence that refugees face an increased risk of schizophrenia and other non-affective psychotic disorders in addition to other mental and physical health inequalities (Hollander *et al*, 2016).

Disproportionate effects on disadvantaged groups

Climate change can be understood as a social determinant for mental health (Compton, 2014). The Lancet's 2018 report on the Climate Countdown states: "By undermining the social and environmental determinants that underpin good health, climate change exacerbates social, economic, and demographic inequalities, with the impacts eventually

felt by all populations.” These inequalities are seen within individual societies but are also magnified in the Global South.

There is evidence of an increased impact of climate change on refugees and migrants (Schwerdtle *et al*, 2018), ethnic minorities, the homeless and vulnerable populations such as the poor in the Global South (Nath & Behera, 2011). Other historically disadvantaged groups are also facing worse health outcomes due to climate change, including women, children and adolescents, elderly, disabled and those with low socioeconomic status. Climate change causes a reduction of social support, the destabilisation of fragile mental health, as well as development of new mental difficulties (Gruebner, 2017).

Likewise, the ongoing COVID-19 pandemic has highlighted and reinforced the inequalities already evident within our society, including access to green spaces and nature.

Children and young people

Children, young people and future generations will disproportionately bear the greatest effects from climate and ecological degradation while holding the least culpability. This impending intergenerational injustice has been expressed in the school strike movement.

RCPsych conducted discussion groups with young people during this process and found high levels of anger, hurt and fear for what the future holds. These psychological dimensions are discussed in more detail later in this statement and is something young people are already reporting.

However, the COVID-19 crisis also presents us with an opportunity to ‘build back better’ (UKHACC, 2020). The RCPsych Values-Based Commission (2016) reported that children and young people want more joined up services and to have their voices heard: rapid changes are already happening within services with more sustainable, joined up ways of working through remote technology.

The findings of the commission are entirely consistent in principle with aims of the Natural Capital Project developed by Gretchen Daily in response to the ecological crisis. She argues that the GDP (gross domestic product) as a measure of economic growth has to be complemented with GEP (gross ecosystem product) and is developing and promoting a range of resources to support this process. As a result of COVID-19, service developments, with their reliance on remote working, are consistent with the sustainability targets towards which the Natural Capital Project is directed and about which so many young people throughout the world are passionately concerned (Tan & Fulford, 2020).

“For two decades we have grown up not living on a stable Earth. And there are the problems of the economy, social media... Now we’re given the climate crisis as well. When we think about the ‘tipping point’, we don’t have a choice. We’ve not contributed, but it’s not an option to opt out’.

– Participant in the RCPsych child and young person (CYP) consultation on the climate and ecological crisis

Limitations of existing research

There is a need to further detail the relationship between poor mental health, psychiatric illness and impacts from climate-related hazards and biodiversity loss. It is equally essential to promote existing and novel research that illuminates how healthy natural environments promote good mental health. Unpicking underlying mechanisms and demonstrating causality is challenging, and a systems approach has been strongly advocated (Berry *et al*, 2017). Finally, there is a need to better explore and clarify the potential co-benefits of taking action on improving mental (and physical) health.

Section 2: Psychological dimensions of the climate and ecological crisis

The scale and impacts of the planetary crisis can be overwhelming, leaving people unsure how to respond. The crisis can be experienced in different ways, with people moving through a variety of attitudes and responses. However, indifference or disinterest is perhaps most concerning, as it is our emotions and thoughts that guide us towards action. Much of our work as psychiatrists involves supporting people through periods of upheaval and uncertainty. Our psychotherapeutic skills are invaluable in recognising and developing ways in which distress is expressed and responded to.

The consensus from climate scientists that the harmful effects of climate change are due to human behaviour urges us to better understand ourselves. (Cook *et al*, 2016). As a species, we need to understand how we have arrived at this place and why we have been unable to make the necessary changes.

The disruptive, traumatic nature of displacement, insecurity and resource scarcity evoke strong feelings in those directly affected. Simultaneously, the growing awareness of the need to change among those of us who are less obviously directly affected creates powerful emotions. Engaging more deeply with these experiences and recognising their importance is critical to helping to find ways of adapting, building resilience and preparing the ground for change. We therefore join other mental health professionals in acknowledging the central role of psychological dimensions in not only maintaining, but also providing solutions to the planetary crisis.

Psychological responses and action

Research from the Yale Program on Climate Change Communication has divided people's attitudes towards climate change in the United States across six categories ranging from dismissive to alarmed (Leiserowitz *et al*, 2020). Amongst Britons, a trend has been noted with a growing number of people identifying as 'very concerned' about climate change (IPSOS MORI, 2019). Each year, more people are shifting their position to one of alarm. Issues of generational justice are also highlighted by a survey showing a majority of British children as 'worried' about the state of the planet (BBC, 2020; Clayton 2017).

Those directly impacted by planetary degradation are most at risk of experiencing distress (Coyle, 2012). Moreover, those most at risk live in low- and middle-income countries that bear the least responsibility (Ingle & Mikulewicz, 2020).

Psychological responses and inaction

Many people feel a degree of psychological distance from the crisis, meaning they are less likely to respond with urgency and action than those more directly impacted (McDonald, 2015). A narrative synthesis of cross-sectional studies of young people's views on climate change found that a willingness to act depends on the extent to which impacts are felt (Lee *et al.* 2020). Such a trend is also seen amongst adults, however a better understanding of the influence of psychological distance is needed (Spence, 2020).

Organisations including the IPCC have identified certain responses – such as denial – as posing barriers to adaptation and action (Weintrobe, 2019). Psychological barriers to change are also related to feelings of apprehension, helplessness and confusion. Misinformation and inadequate political leadership can serve to strengthen other unconstructive responses such as fatalism, disavowal (Cunsolo, 2018) and wishful thinking. These reactions can be countered by simplifying the issue, providing practical solutions and demonstrating local impacts of planetary change (Cianconi, 2020).

Forms of distress

Extreme weather events and ecological degradation can have direct psychological impact on those who experience them first hand, But, they still can cause distress to those witnessing them through media reporting. Witnessing such climatic events has been tied to a range of emotions, which although not indicative of illness leave a psychological wake. The increased use of terminology such as 'eco-distress' (as well as 'climate grief', 'ecological grief' and 'solastalgia'), reflects a growing recognition of this emerging issue.

Eco-distress

The term 'eco distress' is used to describe a range of reactions, including hopelessness, sadness, guilt, anger, worry, fear and alarm to the bad news about our planet. It is important to note that these reactions have been framed as reasonable and functional (Cunsolo, 2018; Cianconi, 2020). Therefore, eco-distress should not be pathologised and is not a mental disorder, and it should be considered a meaningful response to the climate and ecological emergency. Health services should help validate and support patients or colleagues who are experiencing eco-distress.

Many children and young people feel fearful and helpless about their future in a climate-changed world. RCPsych has recently published guidance for young people suffering from eco-distress and guidance for parents and carers.

“Acknowledge that this is not just typical anxiety and depression. It feels different. Stop giving the advice. If it causes you stress, leave it to someone else. [Do what others] are doing: Hold us. Offer therapy to activists.”

- Participant in the RCPsych child and young person (CYP) consultation on the climate and ecological crisis

Psychological support, adaptation and resilience

Important work has already been developed by psychology and psychotherapy colleagues (BPS, APA, Climate Psychology Alliance (CPA)), which includes a range of practices for individuals and groups to face difficult feelings ([Work that reconnects](#)). Active hope, eco-psychological insights, nature connectedness, deep adaptation and many other approaches are exploring these psychological processes and transformations (Macy, 2021; Bendell, 2018).

There is already considerable psychiatric and psychological expertise in the promotion of resilience, mental health responses to extreme weather events, and management of trauma-related conditions. We welcome a renewed respect for and learning from indigenous ways of living in harmony with nature. There is also the extensive contribution from faith practices and communities who recognise the spiritual and ethical dimension of environmental challenges and the place of ceremony and prayer in meaningful human transformation.

The core skills of every psychiatrist lies in assessing and helping people in distress, who present risks to themselves or others. Familiar with balancing social and individual psychological factors, we are in a position to help formulate solutions with both short-term and long-term perspectives. Transferring, extending and offering these psychotherapeutic skills to address the wider challenges of the climate and nature crisis for individuals and populations is a challenge open to us as mental health professionals.

Section 3: Finding solutions

Despite facing unprecedented global climate and ecological threat, we can, indeed must, take positive and coherent action. Health professionals should act to protect and promote public health in the face of these threats. Mental health professionals can take advantage of the trust they hold, their expertise and diverse knowledge, to become leaders in articulating the health consequences of the planetary emergency.

Creating sustainable mental health services

The NHS in England produces 27.1m tonnes of carbon annually (NHS England, 2018) and is the single largest emitter of greenhouse gases in the UK public sector. The work of the Sustainable Development Unit and The Greener NHS Campaign is helping the NHS move to reach net-zero carbon emissions. More work is urgently needed and mental health services should be at the forefront of finding solutions which create truly

sustainable mental health services. The following sets out how mental health services can contribute to the [‘Race to Zero’](#).

In Scotland, the NHS has targeted net-zero emissions by 2045. This includes each NHS Health Board establishing a Climate Change/Sustainability Governance Group to oversee their transition to a net-zero emissions service. NHS Scotland has also appointed the global consultancy, Ricardo, to support its activities towards a net-zero target.

In 2019, Welsh Government declared a climate emergency for Wales to help trigger more focused and greater action to meet the climate change challenge. Welsh Ministers have also re-enforced the ambition for the public sector in Wales to be net-zero carbon by 2030. As the largest public sector organisation in Wales, the NHS has an important role to play to contribute towards this target (Welsh Government, 2021).

The [Decarbonisation Strategic Delivery Plan for NHS Wales](#) sets out proposals which in some areas will require a fundamental shift in the nation’s approach to healthcare.

Preventative psychiatry and a wellbeing approach

To promote sustainable care, psychiatry needs to bolster primary, secondary and tertiary prevention efforts. Detecting and treating illnesses early to halt or slow their progress can reduce relapses, and prevent patients deteriorating to the point of needing hospitalisation. A preventative approach also looks to address inefficiencies in care.

Climate change and biodiversity loss are social determinants of health. There needs to be greater emphasis on the importance of social determinants of mental health more generally. An understanding and recognition of these ‘upstream factors’, such as poverty and childhood trauma, is part of any public mental health perspective (Byrne & James, 2020). A population cannot be expected to be healthy without adequate housing, robust health and education services, nature rich green and blue spaces and a prioritisation of readily accessible nutrient rich foods.

Choosing Wisely and sustainable use of medication

Procurement (the purchase of medication and medical equipment) accounts for the majority (60%) of the carbon footprint of the NHS in England (NHS England, 2009). A 2016 study showed that a reduction of £300,000 could be achieved across England by improving prescribing behaviour of just one psychiatric medication (flupenthixol decanoate LAI), which equated to £250 per patient per year and 170,000 kg CO₂e (Maughan, 2016). NHS Psychiatric services need to re-assess current services and interventions to improve their sustainability. Psychiatrists should aim to prescribe medication at the lowest effective dose, monitor and discuss adherence and be aware that stopping unnecessary prescribing in collaboration with patients can be an effective intervention.

Improving quality and thoughtfulness of care is an important part of achieving sustainability. Choosing Wisely UK is part of a global initiative aimed at improving conversations

between patients and their doctors and nurses. By having discussions that are informed by the doctor, but take into account what's important to the patient, both sides can be supported to make better decisions about care. Often, this will help to avoid tests, treatments or procedures that are unlikely to be of benefit.

Green Plans

A Green Plan is an NHS Board-approved document outlining an organisation's aims, objectives, plans and priorities for improving their local and global environmental and socio-economic impacts (NHS England, 2018). It aims to help NHS trusts to drive improvements in the best interests of the public's health, and ensure services remain fit for purpose today and for the future.

A Green Plan sets out a vision, an action plan and ways to report and track progress of how NHS trusts work towards meeting their carbon reduction targets. These include areas such as capital projects, asset management and utilities, human resources, travel and logistics.

Clinician input is particularly important in the following areas:

- Sustainable care models – such as a recovery orientated approach, prioritising the well-being of staff, integrating physical and mental health care and linking up with local community services to provide more holistic social support.
- Green space and biodiversity – such as green walking projects, growing food and planting to increase biodiversity in hospitals.
- Sustainable use of resources – such as choosing wisely when prescribing, electronic referral forms and reducing the amount of clinical waste.

Green Plans set out a path by which NHS organisations can improve the health of the local community in a way which respects their dependence on the planet. All NHS organisations should act to ensure they have a Green Plan to set out how they can achieve the goal of a carbon zero organisation that is nature friendly.

Social prescribing and sustainability

Social prescribing supports the 'social' in the biopsychosocial approach and part of its proposed therapeutic benefit is via enhanced connection with nature and communities. Social prescribing is the term used for introducing individuals to activity-based groups in their local area, examples include groups for gardening or walking in nature and activity groups such as football, drama and knitting. These groups are community based and often run by the charitable or voluntary sector. The 'prescription' element of social prescribing is the tailored signposting to groups that may benefit a person's physical or mental health. This signposting usually happens via a meeting with a link worker", who spends time with the person to establish what is of interest to them and is aware of all local groups.

Social prescribing can be beneficial in the prevention of mental illness, recovery and in maintaining remission. Social prescribing is not a substitute for other treatments for mental illness such as talking therapies or medications but can be used in combination. It can play a substantial part in reframing psychiatric treatment to make it more preventative, holistic and sustainable (RCPsych, 2019). Keeping patients well is the most sustainable thing we can do as psychiatrists.

Through better engagement with local charitable and volunteer organisations, social prescribing has the potential to reduce the burden on primary care and community mental health services. It can also provide a legitimate option for those without a mental illness but with psychological distress related to social factors, such as loneliness, thus avoiding inappropriate management of these issues within a medical model.

Embedding planetary health in medicine

It is important that we embed planetary health in medical practice and emphasise how our health is dependent on that of our planet's. Education around the impacts of climate and ecological change on mental health and the actions that psychiatrists can take as health professionals should be embedded within training and educational programmes. In time, we may need to build in clinical time to deal with climate and biodiversity related issues, such as responding to eco-distress in our younger patients or adapting our services to ensure they are more resilient to a changing climate.

Nature, nature-connectedness and mental health

There is consensus that exposure to nature has positive effects on psychological wellbeing and can reduce risk factors for mental illness (Bratman, 2019). Reductions in stress, fatigue, anxiety and depression have been demonstrated as a result of exposure to natural environments and these benefits may be most significant for marginalised groups (DEFRA, 2017). There is evidence of the benefits of contact with nature in relation to emotional state, improving self-esteem and mood and reducing anger and anxiety (Bowler 2010; Barton & Pretty, 2014). Other studies have shown that individuals who moved to greener areas had significantly better mental health in the years after moving (Alcok, 2014; White, 2013; Capaldi, 2014; Schultz, 2002). A sense of 'nature connectedness' (i.e. one's subjective connection to nature) is also associated with increased positive affect, vitality and life satisfaction (Capaldi, 2014; Schultz, 2002).

By restoring connections with nature, greater ecological concern and sustainable behaviour can be promoted, whilst improving wellbeing (Bowler, 2010; Barton & Pretty, 2010). In addition, greening of our urban spaces will result in co-benefits to our environment (for example through improved air quality, improved cooling) and to health (Kingsley, 2019).

The United Nations predicts that by 2050, 68% of the world's population will live in urban areas – this will equate to nearly 7 billion people. Focus, therefore, is needed on good urban design, reduction in pollution and mass active transport that enables access to green and blue space for everyone, including those from disadvantaged groups, including those with mental illness. Equal access to nature must become a priority of the UK government, NHS and mental health services.

Transcultural approach

In consulting with experts and partners, the College heard from many about the importance of incorporating principles of racial and cultural justice when approaching issues of climate and ecological change. These are global issues, and one in which the Global South is facing catastrophe sooner than Europe and North America. College members who live and work in the Global South will have important expertise in how we understand the impacts of climate change on mental health in the places in which they practice.

Co-production and inclusivity

The climate and ecological emergency is not an issue that can be tackled solely from the top down. In mental health services, progress can only be made using co-production to promote sustainable services through the breaking down of unhelpful silos. Evidence suggests that shared decision making can help to reduce overtreatment and may be beneficial to disadvantaged groups (Stacey, 2011; Durand *et al*, 2014)

Actions beyond the health arena

RCPsych is not an expert on the actions needed outside of healthcare to mitigate climate change and biodiversity loss. Below is a list of other organisations with direct experience and expertise who have made recommendations for action to tackle climate change:

- [Committee on Climate Change – Reducing UK emissions: 2020 Progress Report to Parliament](#)
- [World Wildlife Fund – Calls for action from the UK Government](#)
- [Climate & Ecological Emergency Bill Alliance – Climate and Ecological Emergency Bill](#)
- [Nature Partnerships](#)

Conclusion

This position statement has detailed the ways in which the climate and ecological crisis is already having significant impacts on mental health in the UK and globally. We have outlined our vision as to how RCPsych will play an important leadership role in responding to the threat this crisis poses to mental health.

Our view is that this must be part of a combined effort across the health sector, referencing a holistic approach to health that reframes our relationship with our planet, nature and all life on earth. Swift and decisive action from government and NHS leaders is essential, but individual psychiatrists can also play a part in tackling the environmental problems that we face. The Royal College of Psychiatrists is committed to playing its part in working across sectors to tackle the climate and ecological crisis and, by doing so, prioritising the mental health of all.

Inclusion of young people's voices in this statement

Throughout this statement we have looked to include and represent the voices of children and young people. A consultation was undertaken with young people from across the country and from diverse backgrounds and experiences in order to inform and reinforce the need for this statement.

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