

RATIONALE AND EVIDENCE FOR INVESTING PROACTIVELY IN THE MENTAL HEALTH OF COMMUNITIES

*Using mental health promotion and
wellbeing science methodologies*

Report for the Mental Health Foundation
of New Zealand

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Table of Contents

- Introduction. 1
- Summary of recommendations 2
- Section 1**
- The argument for change and how to achieve it 3
 - Context 3
 - What is the solution?. 4
 - What is mental health promotion (MHP)?. 5
 - How does mental wellbeing science apply to MHP? 6
 - What evidence is there to show that MHP can increase mental wellbeing in populations and reduce risks of mental illness?. 7
 - How is MHP and mental wellbeing relevant to Māori? 8
 - Don't we already have mental health promoters in DHBs and some health NGOs around the country? 9
 - Don't mental wellbeing interventions just help well people get even better and have no effect on people who are mentally unwell? 9
 - How can we know if mental health is improving and mental wellbeing is increasing? 10
 - What can WHO5 mental wellbeing population data tell us that is useful? 10
 - Where can MHP programmes be applied?. 11
 - Specifically, how would a MHP programme work? 11
 - Community level. 11
 - National level, specific issues 12
 - What can people learn and how can they change from MHP programmes?. 12
 - What are the social threats to psychological wellbeing that MHP programmes can help counter?. 12
 - What are the costs of an effective health promotion-programme? 13
 - Why do mental health problems seem to be getting worse in New Zealand?. 13
 - Don't we have to focus on fixing mental health services before we worry about mental wellbeing? 14
 - Why did the Government provide a large boost for mental health promotion to protect against the psychological stress of COVID-19, and following the Christchurch Earthquakes?. 14
 - Why did the Government take a comprehensive and upstream approach to the COVID-19 pandemic but not to the mental health crisis? 14
 - What the MHF recommends 14

Section 2

- Evidence supporting population and community wellbeing-oriented mental health promotion programmes 17
 - Introduction 17
 - Brief assessment of evidence strength 17
 - Population wellbeing 18
 - Can wellbeing be improved at a population level? 18
 - Is there evidence that improving mental wellbeing at a population level can lead to reduced mental illness? 18
 - VicHealth evidence review of primary prevention of mental health conditions 20
 - Community dynamics and better wellbeing 21
 - Is there evidence that segments of the population and communities can play a greater role in shaping their own health? 21
 - Is there evidence that shows segments of the population and communities who engage in mental health promotion and prevention get better mental health outcomes?. 22
 - Is there evidence that health-related behaviours can change in a population leading to better health outcomes? 23
 - Does increasing mental wellbeing lead to better societal outcomes overall?. 24
 - Is there evidence that social marketing can be used to improve public health? 24
 - Mass media campaigns 24
 - Is there evidence for community engagement and empowerment approaches to improving health?. 25
 - Evidence-based framework on community-centred approaches for health 25
 - Is there evidence that emotions and behaviours are contagious in populations, and if so, can this dynamic be used to spread mental wellbeing? 27
 - Efficacy of increasing wellbeing to counter poor mental health. 28
 - Is there evidence to show that mental health can be positively affected through modified behavioural patterns of individuals and communities? 28
 - Creating an Indigenous, Māori-centred model of relational health: A literature review of Māori models of health. 30
 - Mentally healthy thinking 30
 - Reducing excessive stress to improve mental health 30
 - Is there evidence that excessive social and personal stress leads to risk of mental illness? 30
 - What is the evidence for non-medical approaches to stress reduction that could be learned in community settings? 30
 - The relevance of mental wellbeing for people experiencing mental illness 33
 - Is there evidence to show that increasing wellbeing is relevant to recovery from mental illness? . . . 33
 - Other issues relating to evidence. 34
 - What is the consistency of evidence for existing psychological therapies? 34
- Appendix 1 35
 - Psychological distress in young people 35
- Endnotes. 37

Introduction

How can the population of Aotearoa/New Zealand become more mentally healthy overall, reducing the demand for mental illness treatment services?

The solutions involve:

- Reducing population-level psycho-social stressors through human centred social policy¹ and positive responses to disasters and global shocks.
- Empowering communities and individuals to learn the behaviours and skills that will protect and enhance their mental resilience and wellbeing.

The current mental health system disempowers people through the implication that mental health problems are random, mysterious and non-preventable. It creates the belief that the mental health and wellbeing of a nation must be mediated through a medical system. This belief persists in the implementation strategy for *He Ara Oranga*. The overall governance and vision for mental health and wellbeing improvement remains within a medical rather than psycho-social paradigm. The initial Mental Health and Wellbeing Commission's 2021 progress report *Mā Te Rongo Ake* states that "The mental health and addiction system continues to be dominated by the biomedical service model". (p21).

This biomedical dominance in mental health policy, not just in Aotearoa New Zealand but globally, also appears to be insufficient to reduce inequities in indigenous mental health and wellbeing outcomes. In Aotearoa New Zealand, upstream approaches must be found that allow Te Ao Māori and Te Tiriti o Waitangi-informed partnerships to focus more on the fundamental drivers of mental health and wellbeing.

The current policy is also failing young people, with large increases over the last decade in diagnosed depression, anxiety disorders, mental distress and antidepressant use. Clearly, these changes are driven by societal, not medical causes, and require societal and cultural solutions.

The medical system has an important role to play in keeping very mentally unwell people safe and using therapeutic approaches to reduce symptoms. It is not well equipped to keep people mentally well in the face of increasing global psychological stressors and within the complexities of communities.

The goal must be to have a mentally healthier nation, not just more and better mental illness treatment services.

Section 1 of this report outlines the argument for change and how to achieve it.

Section 2 provides an overview of supporting evidence.

Summary of recommendations

1. Aotearoa must move progressively towards sophisticated upstream approaches to mental health as part of the solution to the current mental health crisis. The upstream approach is best informed by evidence from mental health promotion (MHP) and the science of mental wellbeing.
2. Policy makers must be aware of the inherent status quo bias towards an illness-orientated medical approach and consider what new and emerging evidence and epidemiological data is telling us about the mental wellbeing of New Zealanders and the pathway forward.
3. Prioritise the implementation of *He Ara Oranga* recommendations (agreed in principle by the Government) to oversee and coordinate enhanced cross-government investment in prevention and resilience-building activities (recommendation 16) and develop an investment and quality assurance strategy for mental health promotion and prevention (recommendation 19).
4. Develop a clearly articulated high level vision for the MHP strategy to capture the imagination and support of all New Zealanders for this significant shift in direction.
5. Establish an advisory team of experts and current practitioners in mental health promotion, epidemiology, social marketing and mental wellbeing science to guide MHP strategy.
6. Ringfence a percentage of the national mental health budget to focus solely on MHP solutions. This begins to send a message that the mental health system is no longer just going to be the ambulance at the bottom of the cliff.
7. Promote to the public an easily accessible time-series dashboard of population psychological indicators (distress and wellbeing) using existing data sets and other supplementary data.
8. Establish an appropriate body outside of the clinical mental health system tasked with documenting the full number of MHP activities in Aotearoa New Zealand, evaluating their activities and identifying the supports they need to make them flourish.

SECTION 1

The argument for change and how to achieve it

Context

The current way we approach mental health through publicly-funded health services is to seek to eliminate symptoms of disorders through medications and provide some limited talk therapies to help people have more useful ways of thinking. In some severe cases, people are isolated from society in special facilities until they are deemed safe to themselves and others and have sufficient capacity for self-care. The prevailing narrative suggests that one in five people in any one year are 'disordered'. This implies being mentally broken, needing to be fixed and requiring professional (but often unavailable) help in the unwieldy mental health system.

This narrative reinforces the idea that people's mental health challenges mainly have biomedical causes. It downplays the combination of social or spiritual setbacks, crises and despair and the pervasive lack of community support, knowledge and skills to look after one's own and immediate others' wellbeing.

The symptom-management approach to mental health has become dominant across the world. It is driven by a culturally narrow epistemology, increasingly based around the American Psychiatric Association's (APA) Diagnostic and Statistical Manual (DSM) and has a long history of service failures, misguided harmful experiments and practices. This includes denial of people's strengths and aspirations, warehousing large numbers of distressed people in inhumane asylums (more recently prisons), labelling sexual preference as a disorder, and keeping distressed people in solitary confinement.

Unresolved problems with the symptom-management approach include increasing psychological distress and common mental illnesses,² a lack of significant suicide reduction across the population, and significant inequity and unmet need. This is despite large increases in funding and service improvement in recent years, anti-stigma programmes, mental health literacy, mental health first aid, and mental health apps.

The most recent attempt to address these problems is *He Ara Oranga*, which has been interpreted as the opportunity for a 'transformation of mental health and addiction services'. Ironically, this transformation is to be enacted by the same system that has allowed the current crisis. This system lacks the competencies to articulate a vision for intervening positively in upstream causes of, and contributors to, mental health problems that are referred to extensively in *He Ara Oranga*. The current implementation process of *He Ara Oranga* is also missing many opportunities for socialising the supports, skills and practices of keeping good mental health within populations and communities of shared interest.

In response to the current biomedically biased illness treatment system, Koi Tū: Centre for Informed Futures, University of Auckland stated in their 2020 report *Protecting and promoting mental wellbeing: Beyond Covid-19* that:

The standard population pyramid of need and service response places those with the most severe mental wellbeing needs at the top (apex) of the triangle, with the preventive population-wide initiatives forming the broad base. This way of thinking must now be inverted to signal the fundamental change in how most stakeholders (and all members of this expert group) conceptualise mental wellbeing and the approaches required to protect and promote this at a national level. It prioritises pre-emptive, primary and secondary prevention to address 'problems of living' in the community. (p3)

They indicated that latest research undermines the certainty instilled in public discourse of the diagnostic categories of mental illness that underpin the biomedical approach, in that:

... (i) susceptibility to mental and emotional distress exists on a continuum; (ii) the specificity implied by multiple diagnostic categories is largely spurious; and (iii) most people will at some stage of their life experience a period marked by high levels of psychological distress, tantamount to meeting criteria for diagnosis. Mirroring this richer understanding of the nature of mental wellbeing, it is increasingly recognised that traditional forms of treatment administered by experts are no longer entirely fit for purpose (except possibly at the more severe end of the spectrum) ...

They also noted:

needs extend well beyond traditional mental illness services and require a very different relationship between a broader range of interventions and individuals and between the government and communities. (p5)

Despite the logic for proactive and upstream intervention, the extensive evidence supporting it (see section 2) and the recommendations (16–19) for mental health promotion and prevention in *He Ara Oranga*, inertia to stick with the old system remains.

What is the solution?

Recommendation 1: Aotearoa must move progressively towards sophisticated upstream approaches to mental health as part of the solution to the current mental health crisis. The upstream approach is best informed by evidence from mental health promotion (MHP) and the science of mental wellbeing.

Preventative, upstream approaches are well established in physical health, with longstanding and well-resourced strategies to prevent disease before it happens. This includes universal public sanitation, drinkable water reticulation, vaccinations, elimination of tobacco smoking, food regulation and positive lifestyle promotion. One example is huge reductions in heart disease that have been achieved from changes in awareness, diet, exercise and changes in smoking-related behaviour at a population level.

The MHF have consistently argued that early intervention and services, while important and necessary, are only one part of the integrated three-pronged public health approach outlined in *He Ara Oranga*. A true public health approach is needed that includes simultaneous action to prevent psychological and emotional harm and to support the population to take actions that build resilience, positive mental health and wellbeing. At the heart of this is creating policies and long-term strategies and investment that aim for universal and optimal mental wellbeing (see recommendations 3 and 4).

Recommendation 1 aligns with the overall intent of the *He Ara Oranga* recommendations “to prevent problems developing, respond earlier and more effectively and promote mental health and wellbeing” (p15). It reinforces the strong mental wellbeing focus of *Kia Manawanui Aotearoa: Long-term pathway to mental wellbeing* and supports the rollout of actions it outlines to strengthen the promotion of mental wellbeing through investment, workforce development, frameworks and guidance.

An increased focus on upstream approaches would require a relatively small transfer of resources from the existing model, now approaching funding of \$2 billion. As upstream methods gain acceptance through increasing evidence, evaluation and utility, this resource transfer can grow. A key advantage of this approach is that it draws on latent social capital, wisdom, tikanga, indigenous and diverse cultural world views, and also community networks. Therefore, investments through government funding that empower communities can have a multiplier effect. The current clinically dominated model of mental health, on the other hand, is a zero-sum game. It relies on

expensive and scarce expertise derived from outside of communities being brought in to 'fix' or 'manage' unwell individuals, who have often become more unwell while being on a waiting list.

The upstream approach is best informed by evidence from two relatively recent but now well-established disciplines: **mental health promotion (MHP)** and **the science of mental wellbeing**. These two disciplines are increasingly defining the fundamentals of mental health through practical experience, research and adaptive population-level thinking. This includes how to move away from an over-reliance on a symptom treatment model as the dominant response to psychological health.

The extent of the evidence supporting the effectiveness of promoting mental health and wellbeing in communities is outlined in Appendix 1.

What is mental health promotion (MHP)?

The purpose of MHP is to use a range of methods to keep people mentally well in their communities and normal lives wherever possible. When people are mentally well, they are not just free from mental illness, but are thriving and experiencing attributes such as optimism, vitality, meaning and purpose, high quality relationships and social engagement, contribution to society, emotional stability and resilience. This reverses the current dominant and policy narrative of 'mental health' being seen as a liability to be fixed, to one where mental health is a resource to be protected. This is consistent with the current World Health Organization definition of mental health as "the foundation for the well-being and effective functioning of individuals. It is more than the absence of a mental disorder; it is the ability to think, learn, and understand one's emotions and the reactions of others. Mental health is a state of balance, both within and with the environment. Physical, psychological, social, cultural, spiritual and other interrelated factors participate in producing this balance."³

MHP does not have a service mentality, because it goes to where the people are in their community settings. MHP will generally see the people it aims to serve as having significant expertise (understanding their own experience and aspirations), so MHP programmes are not suited to exact replication into different populations.

Because of its flexibility, MHP is better suited to responding to the 'wicked problem' of protecting mental health in an increasingly psychologically challenging world. Wicked problems consist of social complexity, contradictory information and lack of clear cause-and-effect solutions.

MHP looks at population- and community-wide health rather than clinical outcomes for individuals, understanding that healthier populations will have fewer ill individuals.

MHP recognises that the quality of people's mental health is a healthy balance of different life domains and therefore uses holistic health models such as Te Whare Tapa Whā.

MHP uses a multidisciplinary approach including public health surveillance, epidemiology, wellbeing science, social and positive psychology, behavioural economics, indigenous and cross-cultural understandings of wellbeing, behavioural change science and nuanced skills such as mentoring, life coaching and storytelling.

MHP is effective through two general approaches:

1. Responding to external threats to mental health and wellbeing, which are found in social and structural determinants and occasional population-wide shocks such as disasters and recessions.

These are best approached at the macro social-policy level, by advocating that all citizens have fair and equitable access to basic resources, healthy food, education and health services, and that minority groups are free from discrimination. The MHP tools are the social

policy levers that create a public service and social direction for the population that is fair, safe, reduces uncertainty, provides stability, social inclusion, supportive communities and opportunity. Reducing community and psychological stress at this level decreases risk factors for mental distress such as depression, anxiety and addiction problems, and creates stable living conditions where people can thrive and reach their potential. This approach is best led by MHP-informed central and local government in co-creation with communities, wherever possible.

2. Creating opportunities to protect and grow people's internal psychological wellbeing and empower community wellbeing.

This involves recognising people's individual vulnerability to stress, level of healthy coping skills and extent of supportive interpersonal relationships. A range of mass media and social and individual learning methods can be used to change attitudes, behaviours and thinking styles that build resilience and empowerment. This approach can work very well when provided in a geographical area or other community with a shared identity. Existing community networks, sense of identity and 'ways of doing things' can be used to enhance social learning opportunities. Resilience can be built by spreading knowledge, hope and skills through communities, flowing on to individuals, creating greater personal agency and empowerment. These are psychologically healthy responses to stressful circumstances.

These two approaches are necessary in combination for effective mental health promotion. If only the first approach is applied, then the response tends to be top-down and negate people's agency to build resources of their own to deal with setbacks in life and define their own path to thriving.

Only applying the second approach can cause people to become disillusioned if their efforts to improve community and individual wellbeing is consistently undermined by harmful social policy, social exclusion or prejudice.

It is well accepted that unrelenting stress leads to, or exacerbates, mental health problems relating to depression, anxiety and addictions. Data from the New Zealand Health Survey shows lower socio-economic groups experience high levels of psychological distress. Other data shows indigenous populations and rainbow communities, facing higher chance of social exclusion through prejudice, racism and neglect, will have poorer mental health.

How does mental wellbeing science apply to MHP?

Mental wellbeing science studies the mix of psychological and physiological states and social relationships to optimise 'mental wellness' in individuals. Mental wellbeing is also referred to as subjective wellbeing, positive mental health or mental wellbeing. This state can include vitality, optimism, hope, meaning and purpose, gratitude, engagement, curiosity, supportive social relationships and calming positive emotions.

A summary of how mental wellbeing enhances resilience and protects against disease can be found at the UK-based Faculty of Public Health (FPH), a membership organisation of 4,000 public health professionals.⁴ They find that a subjective sense of wellbeing and a shared sense of wellbeing in communities have a protective affect against chronic and toxic stress and many mental and physical illnesses.

The Centre for Healthy Minds, a research institute specialising in subjective wellbeing, has described mental wellbeing as "not a static 'thing' - but a set of skills that can be learned and cultivated over time".⁵ Wellbeing is not just dependent on social conditions but can also be strengthened through an educational and social learning approach.

Some people remain sceptical that wellbeing is a serious concept to consider in relation to improving population mental health. This may be in part due to the illness narrative of mental health and the associated cultural inertia that has persisted for several centuries driven by vested financial, pharmaceutical, professional and research interests.

Despite this, disciplines such as cognitive neuroscience, social and positive psychology, and epidemiology are giving a much more nuanced and broader picture of what mental health is.

Recommendation 2: Policy makers must be aware of the inherent status quo bias towards an illness-orientated medical approach and consider what new and emerging evidence and epidemiological data are telling us about the mental wellbeing of New Zealanders and the pathway forward.

Thus far, the overall governance and vision for mental health and wellbeing improvement – including the implementation of *He Ara Oranga* – remains within a medical rather than psycho-social paradigm.

Kia Manawanui Aotearoa, as a pathway to wellbeing, provides hope that the system shift called for by *He Ara Oranga* is achievable. But there remains a significant risk that decision-makers driving change will revert back to the long-held deficit model and biomedical response with a focus on service expansion to the exclusion of wellbeing promotion.

Even within the public/population health sector there is a poor understanding of population-level approaches to mental wellbeing outside of the impact of the determinants of health. This same lack of awareness and understanding is evident among public health officials within government. Policy makers must be aware of their own biases and blind spots and be able to draw on the expertise of MHP experts and current practitioners in planning, consultation, decision-making, implementation and evaluation (see recommendation 5).

What evidence is there to show that MHP can increase mental wellbeing in populations and reduce risks of mental illness?

MHP has been criticised as having a lack of evidence to show that it will significantly benefit mental health and reduce the incidence of poor mental health. This is contrasted with the perception of high-quality evidence for the symptom-treatment approach.

There are several areas to note in response to these doubts:

- We need different types of evidence and statistical models for MHP. It is not carried out in clinical settings or with isolated treatments, and so variables are not easily controlled for. This makes MHP not suited to the randomised-control-trial style of evidence that some may be looking for. A mental wellbeing intervention will often have causality in both directions – for instance, exercise leads to improved mental health and wellbeing *and* improved mental health wellbeing leads to people being motivated to exercise more.⁶ MHP results are also measured at a population level in naturalistic rather than clinical settings. MHP and population wellbeing intervention programmes need to be implemented based on sound findings or what works or is likely to work, and then be evaluated for effectiveness over time and against measured changes in the population group involved. "Much of the evidence of health promotion's effectiveness must be derived from community-based research. There cannot be total reliance on traditional, quantitative measures. Including qualitative methods gives a better understanding of what works and what does not. Although such 'real world' research is a complex undertaking, it is nevertheless possible to develop a body of dependable knowledge." (WHO)⁷

- MHP and mental wellbeing science do have a rapidly growing research base. In section 2 of this report there is an extensive sample of the type and variety of evidence available to support investments in empowering communities in their mental health and wellbeing.
- Where there is a lack of evidence in MHP this does not necessarily confirm a lack of effectiveness. More evidence is needed in MHP, as it is in clinical services, but firstly more programmes need to be established and funded sufficiently, so they can have robust evaluation and research frameworks. MHP and mental wellbeing are newer disciplines without the large institutional support that mental illness has had through the pharmaceutical industry and clinical institutions.
- The evidence for the effectiveness of the current mental health system's symptom-reduction approach can also be questioned. Firstly, pharmaceutical industry interference and placebo-related explanations of effect size cast doubt on the actual effectiveness of many common medications.⁸ Secondly, regardless of the efficacy of individual treatments and high levels of satisfaction from service users,⁹ data on mental health macro-outcomes suggests the dominant focus on psychiatric treatment appears to be failing in Aotearoa New Zealand and other countries with comparable mental illness treatment systems.¹⁰ The following excerpt from a 2017 article in the *Australian and New Zealand Journal of Psychiatry* outlines the extent of the problem:

In New Zealand, for example, mental health funding rose from NZD 1.1 billion in 2008/2009 to nearly NZD 4 billion in 2015/2016 (New Zealand Ministry of Health data). The number of psychiatrists and psychologists almost doubled from 2005 to 2015. More people than ever are receiving mental health treatment. For example, the Auckland District Health Board reported an increase from around 2000 crisis referrals in 2010 to more than 6000 in 2015. More people are taking psychotropic medications than ever recorded. PHARMAC data in 2015 reveal that 13.7% of all New Zealanders have been dispensed antidepressants and 3.1% antipsychotics. Both rates have increased by more than 50% in the past decade (Ministry of Health Pharmaceutical Collection). Despite all this effort, objective measures of community mental health have not been improving and in most cases are worsening. According to the New Zealand Health Survey, the number of children suffering from psychiatric problems has more than doubled between 2008 and 2013. The percentage of the adult population with high psychological distress (K10 \geq 12) has increased from 4.5% in 2011 to 6.8% in 2016. There has been a fourfold increase in people on disability benefits due to a mental illness from 1991 to 2011. ¹¹

To respond effectively to social demand for better mental health in a rapidly changing world, governments will not have the luxury to wait for traditional 'gold standard' research to deal with many issues relating to mental wellbeing. MHP is well suited to using, and being informed by, flexible and adaptable action research evidence models, where learning can adapt to real-time needs.

As the MHF sees it, the current mental health system is blinkered by its own clinical concerns and the biomedical model that has been the basis for professional training. It is a model that is based on scarcity and rationing of services and 'fixing one person at a time'. It seems that mental health policy is stuck in circular reasoning, i.e. because so much resource is put into one area (individually-focussed symptom reduction), then this must be where the solution lies.

New ways of doing things will require new epistemologies and evidence-collecting and evaluation methodologies.

Despite uncertainties and gaps in the evidence, we know enough about the links between social experience and mental health to make a compelling case to apply and evaluate locally appropriate policy and practice interventions to promote mental health. (WHO)¹²

How is MHP and mental wellbeing relevant to Māori?

Clearly Māori are not doing well compared with other population groups in the current psychosocial environment. This provides one of the strongest arguments for finding upstream solutions provided

by MHP approaches to create increased mental wellbeing. Continued high use of mental illness treatment services strongly suggests that in the current environment these are lacking in providing curative or recovery effects for Māori:

- “Māori made up approximately 17 percent of New Zealand’s population, yet they accounted for 29 percent of all mental health service users.
- approximately half of all Māori service users were under 25 years of age, compared with approximately 29 percent of non-Māori service users.
- among service users under a community treatment order, 79 percent of Māori were living in the most deprived deciles (8–10), compared with 30 percent of non-Māori.”¹³

Prevalence of adult Māori psychological distress has almost doubled in the nine years prior to 2019/20, is almost double that of the whole adult population, and is much higher in Māori women.¹⁴

There is evidence to show the efficacy of cultural identity as psychologically protective for Māori.¹⁵

A report by Te Hīringa Hauora (Health Promotion Agency) on the mental wellbeing of Māori provides insights into how “Māori experience three aspects of wellbeing considered important in reducing the impact of depression and/or anxiety on them, improving their social inclusion, and addressing mental health inequalities:

- Whanaungatanga and belonging
- Cultural connectedness and reconnection
- Strength of cultural identity.”¹⁶

We believe that the evidence and population outcomes speak for themselves, pointing to the need for a vastly different approach to the current default illness treatment model.

Don’t we already have mental health promoters in DHBs and some health NGOs around the country?

Yes, and these positions can help provide resources and education to their local communities outside of the mental illness treatment system. There are however limitations to having one or two people here and there, without a coordinated national response. They lack dedicated programmes with fully resourced social marketing and community engagement expertise, which can be evaluated against baseline mental health and wellbeing measures.

The implementation of *He Ara Oranga* and the progress report from the Mental Health and Wellbeing Commission *Mā Te Rongo Ake* show some promising developments in MHP-type approaches with community involvement in solutions and some social wellbeing strategies. These however lack overall coordination and can potentially be seen as afterthoughts to the overriding agenda to provide more and better illness treatment services.

Don’t mental wellbeing interventions just help well people get even better and have no effect on people who are mentally unwell?

The MHF believes there is a common misunderstanding that mental wellbeing is a luxury only for the already well, and that when people are unwell, all that is effective for them is symptom reduction, usually by clinical means.

There are several reasons as to why increasing mental wellbeing will have a positive effect on those suffering major mental illnesses.

1. Recent research shows that building wellness plans into treatment for psychosis can be or is likely to be effective,¹⁷ although there are also challenges in overcoming the assumptions in

current symptom management services that can undermine these efforts. Having wellbeing interventions more strongly incorporated into clinician training and expectations, and widespread in the general population, will make their implementation easier in practice.

2. Positive psychology interventions are proven to be effective for treating depression.¹⁸
3. Building personal wellbeing efficacy at a population level is likely to shift the whole population curve towards greater wellbeing, reducing overall demand on services. “In order to reduce the total burden of distress and the common mental disorders, the epidemiological evidence suggests that we need to shift the whole population towards positive mental health. This can be done by training members of the population in the skills that underlie wellbeing” (Felicia Huppert, Emeritus Professor of Psychology, Cambridge University, UK).¹⁹
4. Anecdotal reports from mental health crisis services suggest that many people who are not unwell in the mental illness diagnostic sense, but are experiencing distress due to life crises, are accessing mental health services as a first port of call. This creates demand on the system that could be freed up for more acute and chronic cases. Equipping communities with the skills to stay well and to better manage life’s ups and downs using strength-based frameworks would reduce this demand.

How can we know if mental health is improving and mental wellbeing is increasing?

Nationally, New Zealand is now collecting adult population data in the General Social Survey using the internationally recognised WHO5, a set of five simple questions that covers five key aspects of wellbeing. It also collects data on loneliness, a key determinant of mental wellbeing, and life satisfaction, which may be a proxy measure for mental wellbeing.

Levels of psychological distress are also measured using the Kessler Psychological Distress Scale (K10) for adults in the New Zealand Health survey, with psychological distress being a reliable indicator of reduced mental wellbeing and increased risk of mental illness. For children, the Strengths and Difficulties questionnaire is used.

At a national level, the combined indicators of psychological distress and mental wellbeing can give a good overall measure of trends in mental health and mental wellbeing.

The Mental Health and Wellbeing Commission is currently compiling key indicators to measure and track overtime people’s wellbeing using the *He Ara Oranga* wellbeing outcomes framework. Factors that contribute to a person’s or whānau wellbeing are grouped under six different areas and summarise what people need to be and feel well.

The MHF believes there should be a national dashboard of time-series mental health and wellbeing indicators for the country that is easily accessible to the public (see recommendation 7).

This would create greater accountability for national mental health and wellbeing-related agencies and services to measure their overall effectiveness and to be able to measure progress in wellbeing.

What can WHO5 mental wellbeing population data tell us that is useful?

In 2020 The Mental Health Foundation engaged IPSOS Research to analyse a representative sample of wellbeing scores in the Aotearoa New Zealand population and mental wellbeing activities that they undertake.²⁰ This data showed that 25 percent of adults are scoring low on wellbeing to the point where they are at risk of sustaining poor mental health. An analysis of the data revealed that low wellbeing correlated with low levels of wellbeing activities, and that people with higher levels of wellbeing activities had better mental wellbeing scores. A recent Sport NZ

study²¹ also found that using just one wellbeing activity – exercise – correlated significantly with increased mental wellbeing.

Where can MHP programmes be applied?

In the wider MHP literature there is evidence showing that MHP programmes can be effective in the following social contexts:

- parenting support
- schools and other educational institutions
- vocational communities (e.g. farming, construction)
- Indigenous communities
- refugee and migrant groups
- rainbow communities
- sports
- geographical areas (e.g. areas affected by disaster)
- workplaces
- health services
- nationally (based around specific issues, such as mental illness-related discrimination, bullying, loneliness)

Specifically, how would a MHP programme work?

MHP can work by providing advocacy at the macro social-policy level and/or by creating programmes that help people learn the awareness, skills and understanding of their mental health and wellbeing. These programmes can give people agency to maximise their wellbeing, even in unavoidable stressful situations and environments.

Outlined below are some generic components of a MHP programme focused at the community level, or on specific mental health and wellbeing issues at a national level.

Community level

A typical methodology of this process includes beginning with a focus on a specific population with a shared identity or community interests who want to improve their mental wellbeing. This would generally comprise:

- a. understanding what motivations the community has to change, and why
- b. co-creating messages and actions on how to increase mental wellbeing within that population, aligning with their interests
- c. using communication experts to make those messages and actions attractive and spreadable
- d. supporting community/sector role models and leaders to provide much of the messaging
- e. using positive stories from the community to demonstrate social proof
- f. helping socialise the behaviour change through events and social contagion
- g. measuring the aggregate changes in behaviour and psychological wellbeing from an established baseline
- h. reviewing and adjusting the programme based on the data

Examples of this approach include the *All Right?* campaign and *Farmstrong*.

National level, specific issues

Generally, these approaches will work well if provided through existing trusted organisations or programmes – often NGOs. Examples of this approach include anti-bullying (Pink Shirt Day) and the response to COVID-19 (Getting Through Together).

What can people learn and how can they change from MHP programmes?

There are many evidence-based intervention areas that can be used outside of clinical settings to create increases in psychological wellbeing and reduce risks of mental illness. As research increases it is also starting to determine optimal 'dose levels' of these activities for good mental health. Some examples of where interventions can be effective include:

- exercise
- good quality sleep
- volunteering (and other pro-social activities)
- healthy diet
- good quality social connection
- positive habit-forming techniques
- affirming cultural identity
- meta-cognition techniques to build awareness of how to slow down the response between trigger-thought-action and help better behavioural outcomes
- reframing techniques and flexible thinking
- self-soothing techniques
- emotional mastery
- self-acceptance

MHP is not limited by the rigidity of clinical models and can apply high levels of creativity to communicating the benefits of behaviour change in alignment with people's overall goals in life. MHP can make the changes enjoyable, socially desirable and not seen as 'government messages'.

Many of these activities have existed as part of human life and been integrated into communities as 'ways of doing things' or tikanga for hundreds if not thousands of years, and just need to be 're-found' within the context of our modern way of life.

What are the social threats to psychological wellbeing that MHP programmes can help counter?

Prior to COVID-19, psychological distress was already increasing in the population, as shown in the *National Health Survey*. The social threats resulting from sudden changes in work and life expectations and other disruptions caused by the managed response to COVID-19 and the ongoing 'long tail' effects are just some of the pressure areas on people's psychological wellbeing. Others include:

Existing social problems (often requiring interventions at a policy level):

- poverty and economic deprivation
- poor maternal and new-born support
- inequality of opportunities and wealth
- racism and cultural colonisation
- discrimination, including mental illness-related prejudice and sexism
- trauma, such as family violence, sexual violence and adverse childhood experiences

Newer and emerging problems (requiring a combination of policy changes and regulation, awareness raising, behavioural changes and community self-determination):

- increasing pace of change and more uncertainty
- difficult housing market
- poor diet marketed by the food industry (particularly for the young and vulnerable)
- decreasing average levels of sleep
- loneliness and social isolation
- increasing sedentary lifestyles
- colonisation of our social and psychological sovereignty, and attention extraction by unregulated U.S. tech platforms
- the digital divide and harmful online content
- 24-hour negatively focused news cycle
- sophisticated consumer advertising that makes people feel they are lacking to incentivise product and service purchases

Occasional population level shocks, e.g.:

- earthquakes and other natural disasters
- pandemics
- economic recessions
- terror events

What are the costs of an effective health promotion-programme?

Just as a professional clinical service needs to be reasonably funded to get good results, so does a mental health promotion programme. Costs are made up of:

- research expertise to set baselines and measure outcomes through surveys and data analysis
- content research to ensure application of latest evidence
- creative and sophisticated social marketing
- social and traditional media management
- relationship building and community engagement
- sponsoring community events
- project management oversight and administration
- resource/guidance/tools development

Well-meaning community groups should not be relied upon to attempt to deliver this type of programme methodology on a shoestring budget, as a cost saving measure. It is not possible and potentially could cause harm.

Why do mental health problems seem to be getting worse in New Zealand?

No one has the complete answer to this question. New Zealand is not alone in experiencing poorer population mental health. It is reasonable to expect that a number of societal trends over the last two decades, adding additional psychological stressors, are cumulatively eroding mental wellbeing and reducing resilience against stress and poor mental health. These additional stressors have been outlined above and all have research showing how they lead to psychological harms. The picture is complicated by some of them (for example increased digital technology) also having some psychological benefits:

These newer psychological stressors seem to be creating more harm for Māori (as noted above) and young people (see Appendix 1).

Don't we have to focus on fixing mental health services before we worry about mental wellbeing?

'Fixing illness treatment services' has been the strategy for a number of decades now. It is clearly not working, with mental distress increasing in the population. Expecting better mental health in any country, including Aotearoa New Zealand, has become a wicked problem needing adaptive and systemically-informed changes. Defaulting solely to illness treatment services to cope with increasing demand is a 'technical fix' that only looks at one part of the wider mental health ecosystem. It is therefore unlikely to ever succeed.

Why did the Government provide a large boost for mental health promotion to protect against the psychological stress of COVID-19, and following the Christchurch Earthquakes?

It is curious that for disasters the government will recognise the upstream impacts of psychological stress on mental health, and fund mental wellbeing interventions, as if somehow during 'normal times' there is little or no psychological stress. Clearly there are many other and possibly more pervasive stressors and challenges for resilience in the population that are driving the increase in psychological distress over the last decade. These need a similarly proactive response.

Why did the Government take a comprehensive and upstream approach to the COVID-19 pandemic but not to the mental health crisis?

If we had taken the same approach to COVID-19 as we do to mental health, we simply would have waited for the virus to spread and then put in place a plan to have 'more and better services' or 'service transformation' to deal with all the unwell people. Of course, that approach would have led quickly to services becoming overwhelmed, as has happened with mental illness treatment services in response to the mental health crisis.

The effectiveness of upstream approaches in physical health are well established. It makes sense to intervene early to prevent larger problems later. Public health in general takes this approach in areas such as sanitation and water quality, providing well-funded and well-organised systems to provide access to the essentials people need to stay well.

We do not, as a country, take this approach to mental health. Perhaps this is due to the outdated thinking that poor mental health happens randomly, from mysterious biological causes, and only affects a small proportion of the population.

What the MHF recommends

See recommendation 1 (page 4) and recommendation 2 (page 7).

Recommendation 3: Prioritise the implementation of *He Ara Oranga* recommendations (agreed in principle by the Government) to oversee and coordinate enhanced cross-government investment in prevention and resilience-building activities (recommendation 16) and develop an investment and quality assurance strategy for mental health promotion and prevention (recommendation 19).

Recommendation 4: Develop a clearly articulated high-level vision for the MHP strategy to capture the imagination and support of all New Zealanders for this significant shift in direction.

Kia Manawanui Aotearoa commits to specific actions to "strengthen national, regional and local leadership and collaboration for mental wellbeing" and "strengthen investment in promoting wellbeing" in schools, workplaces and community settings. This is a good start, but we need

a detailed strategic national plan, as recommended by *He Ara Oranga*, to coordinate the operationalisation of these mental wellbeing promotion actions across the sector and communities, and to set a high-level vision for coordinated action and for what good MHP looks like. Such a strategy should be developed with the buy-in of communities and the sector, and clearly show what role everyone plays to make a collective impact.

Recommendation 5: Establish an advisory team of experts and current practitioners in mental health promotion, epidemiology, social marketing and mental wellbeing science to guide MHP strategy.

There is a significant gap in the availability of mental wellbeing promotion and public health prevention expertise from a mental health perspective across government and within the mechanisms currently driving mental health strategy and implementation. An advisory team would support the delivery of the detailed strategy for MHP (recommendations 3 & 4), provide independent advice to the Minister and policy makers, and support the external oversight group for *Kia Manawanui Aotearoa*, the Mental Health and Addiction Assurance Group. Without this expertise within the direction setting and accountability structures, there is a very real risk that implementation of the mental wellbeing focus of *Kia Manawanui* will be ineffective, de-prioritised or forgotten altogether.

An advisory team would also support the new Public Health Agency and the Public Health Advisory Committee. These new entities have a role to play in delivering the prevention and promotion-focused recommendations of *He Ara Oranga*, but to do so they must include or at the very least have access to specific mental health/population health expertise and capability. The MHF have advocated for mental wellbeing to be made an explicit priority in the Public Health Advisory Committee's terms of reference.

Recommendation 6: Ringfence a percentage of the national mental health budget to focus solely on MHP solutions. This begins to send a message that the mental health system is no longer just going to be the ambulance at the bottom of the cliff.

A dedicated ringfenced fund is vitally important for the implementation of the MHP and wellbeing focussed intent of, and actions in, *Kia Manawanui Aotearoa*. This percentage of the national mental health budget will be small, but it needs to be protected from the insatiable resource demands of 'service improvement', just as DHB compliance with the existing ringfenced mental health and addiction requirements needs to be scrutinised and enforced. We only need to look to the 2019 Wellbeing Budget's \$1.9 billion investment into mental health, where there was zero funding for simple preventive and asset-building work at the expense of significant service and infrastructure investment.

Recommendation 7: Promote to the public an easily accessible time-series dashboard of population psychological indicators (distress and wellbeing), using existing data sets and other supplementary data.

We need comprehensive and readily available information on the state of the sector and trends over time, and this information needs to be easy to find and not simply 'publicly available.' If we are to see any progress on key indicators, the whole sector must be able to see where we have come from so we can work together to drive change going forward.

Recommendation 7 should guide the scope and aims of the actions in *Kia Manawanui Aotearoa* to "build our understanding of mental wellbeing prevalence, needs and equity."

The last full prevalence study *Te Rau Hinengaro NZ Mental Health Survey 2006* was undertaken 15 years ago. We support continued consideration of the comprehensive mental health and addictions survey as per *He Ara Oranga* recommendation 11.

Recommendation 8: Establish an appropriate body outside of the clinical mental health system tasked with documenting the full number of MHP activities in Aotearoa New Zealand, evaluating their activities and identifying the supports they need to make them flourish.

To build our MHP expertise, confidence and capability in Aotearoa we must have a dedicated body to support and foster existing networks and local pilots, share knowledge and support best practice. This body should inform investment decisions locally, regionally and nationally.

SECTION 2

Evidence supporting population and community wellbeing-oriented mental health promotion programmes

Introduction

Section 1 of this report has shown that the current approach of mental health services, focussing mainly on symptom treatment and management, is falling short in meeting the needs of the population.

This section provides an indication of the range and type of extensive evidence supporting the upstream intervention approach to mental health. Many individual papers and evidence reviews support the case for mental health promotion programmes that engage communities, including nations, in taking steps to collectively improve the mental wellbeing outcomes of the people in that community.

This overview of evidence is not intended to be a full academic review and grading of all available evidence, but a sample to show the extent of the science relating to community-orientated and largely non-clinical upstream mental health interventions as a whole as well as component parts. It also includes indicative evidence from wider health promotion successes to show that upstream collective approaches relating to health behavioural change can be effective.

The focus of this section sits between the actions at a macro government policy level on the one hand and individually-motivated behaviour on the other. It covers the middle ground relating to the community dynamics that create collective empowerment through information, peer support, increased confidence around managing mental health needs, and advocacy of social groups. Notwithstanding this, population-based interventions often overlap between the macro, meso and micro.

Much of the evidence here considers what works at the level of input components required for mental health promotion programmes. This includes effective health and wellbeing information dissemination, community engagement on health issues, behavioural change, non-clinical mental wellbeing practice as protective and learnable skills, and the effectiveness of wellbeing practices in reducing clinical indicators of poor mental health.

Brief assessment of evidence strength

There appears to be strong evidence to show that:

- promotion and prevention programmes including community engagement can change overall health-related behaviours at a community and population level
- mental health is significantly affected both positively and negatively by the social and physical environment
- mental wellbeing can be increased using macro, meso and micro interventions
- increasing wellbeing in individuals can lead to reductions in mental illness symptoms and aid in recovery from mental illness.

There appears to be moderate evidence, or further evidence is needed, to show:

- that increasing wellbeing across a population directly causes reduction in illness symptoms across the same population
- optimal 'dose' levels for wellbeing interventions
- how multiple wellbeing interventions interact together to have the best effect.

Population wellbeing

Can wellbeing be improved at a population level?

The UK Department of Health compiled a compendium of factsheets looking at wellbeing across the life course and concluded that:

- "Wellbeing has been found to have an impact on many aspects of people's lives such as their health, work and social relationships. These relationships have also been found to impact on people's wellbeing.
- There are interventions designed to improve wellbeing, some of which have been successful. There are also interventions designed to achieve other outcomes such as improved physical fitness, involvement in volunteering and neighbourhood social cohesion. While improved wellbeing was not a primary objective for these interventions, participation was linked with increased levels of wellbeing.
- Sometimes we may lack evidence that demonstrates that a particular intervention aimed at improving different aspect of people's lives also improves wellbeing. However, if we know that a particular behaviour (e.g. physical activity) leads to increased levels of wellbeing, we may hypothesise that improving this behaviour will also help to increase levels of wellbeing."

The report lists evidence showing that there are opportunities to increase wellbeing in the areas of physical health, learning, workplaces, environment, social inclusion, parenting and early years interventions. Most evidence shows or suggests a two-way causality between wellbeing and the wellbeing interventions.

Found on 15 Aug 2021 at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/277593/What_works_to_improve_wellbeing.pdf

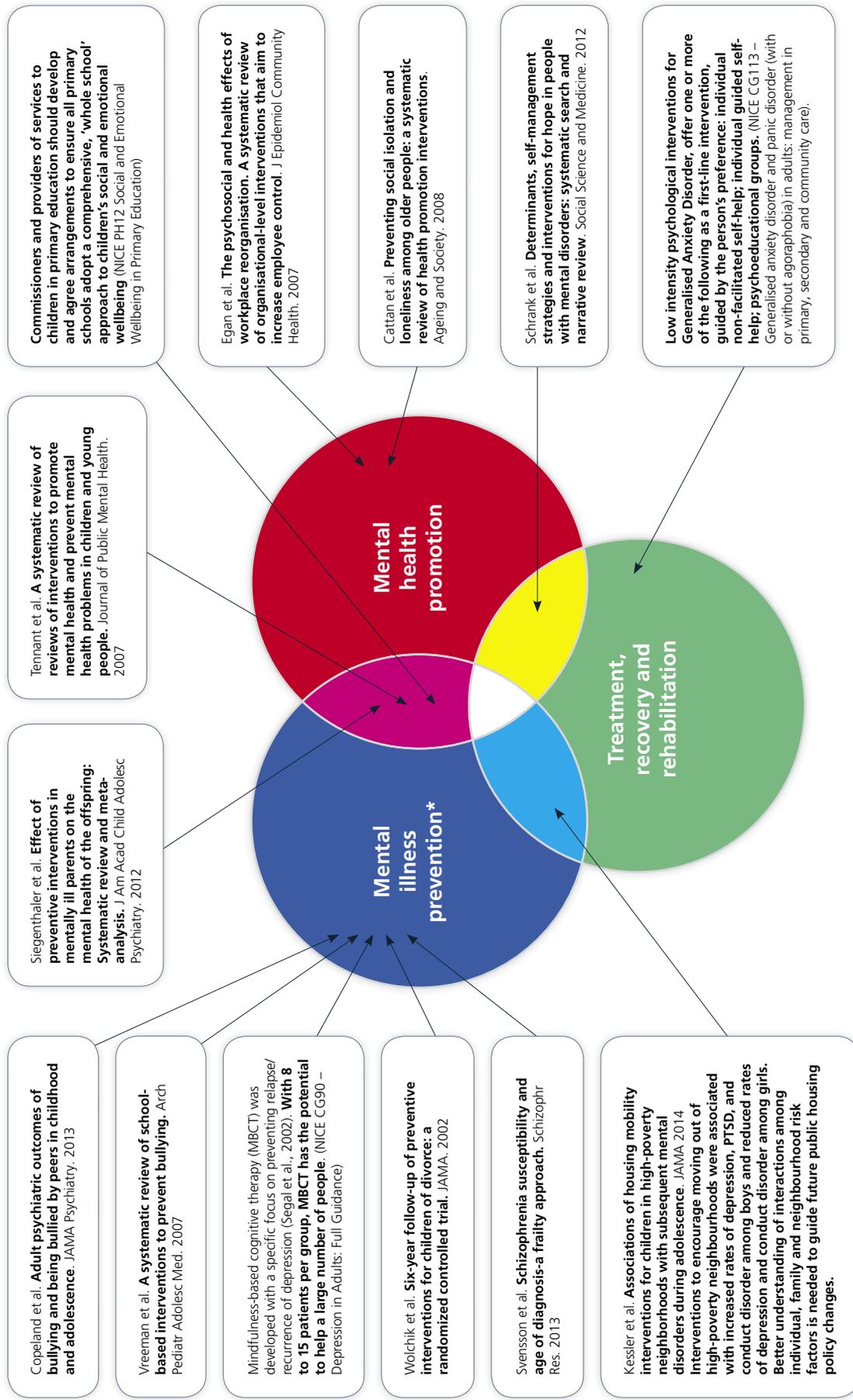
Is there evidence that improving mental wellbeing at a population level can lead to reduced mental illness?

This question was explored in detail by the UK Chief Medical Officer in her 2013 annual report.²² Her review suggested the evidence is not yet sufficient to support a theory that simply increasing mental wellbeing in the population (as measured by instruments such as the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS))²³ will lead directly to a reduction in mental illness, i.e. shifting the population curve as proposed by Huppert.²⁴ The CMO's analysis tended to favour the approach supported by the research of Keyes and others²⁵ that shows a partial correlation between mental wellbeing and mental illness, as shown in the dual continua approach to mental health, rather than a linear continuum from severe illness to optimal wellness. This led the CMO to support an approach to public mental health that limits a direct focus on increasing wellbeing but sees an overlap between mental illness prevention, mental health promotion, and recovery and treatment. This is outlined in the following diagram copied from her report, which also includes examples of supporting evidence.

Davies, S.C. "Annual Report of the Chief Medical Officer 2013, Public Mental Health Priorities: Investing in the Evidence" London: Department of Health (2014)

Figure 2.2 Public mental health: a conceptual model derived from the WHO framework and illustrated with evidence based examples

Public mental health - a conceptual model derived from the WHO framework (illustrated with examples from the peer reviewed evidence base)



* Primary, secondary, tertiary or universal, indicated, selected prevention

Davies and Mehta

Additionally, the following evidence suggests that reducing common psychiatric symptoms at a population level in relatively well people, through non-clinical means rather than just service-based treatments, could decrease prevalence of psychiatric disorder in that population.

The paper of Anderson et al. (1993), based on cross-sectional data, showed that minor psychiatric disorder in a population is linearly related to the mean number of psychiatric symptoms in the population. The present investigation asks whether the same relationship holds longitudinally as well as cross-sectionally. Data from a 7-year follow-up of a general population sample demonstrate, for the first time, that a relationship exists between changes in prevalence of psychiatric disorder and changes in the mean number of psychiatric symptoms in a given population. Moreover, the relationship is linear; a one-point decrease in mean scores on the GHQ-30 is associated with a 6% decrease in prevalence of disorder.

Whittington JE, Huppert FA. Changes in the prevalence of psychiatric disorder in a community are related to changes in the mean level of psychiatric symptoms. *Psychol Med.* 1996 Nov;26(6):1253-60. doi: 10.1017/s0033291700035972. PMID: 8931171.

The debate about the level of psychological effect that can be gained by improving mental wellbeing in the population, independently of treating mental illness, remains live and will no doubt be informed by emerging evidence in the field. It is worth noting commentary by Sarah Stewart-Brown, Chair of Public Health, University of Warwick:

A better understanding of the nature of mental wellbeing will follow rather than precede interest in this area. We are still not clear on the precise definition of the physical activity that is optimum for health, for example, but we are clear that it would be a good idea to encourage more participation in exercise.

There is no need to be able to measure public health issues with great precision before starting preventive programmes. Well enough is often good enough in public health.

If we did need to precisely measure a problem before trying to tackle it, we wouldn't have begun public health activity on diet, physical activity or alcohol consumption. Research and development on how to measure such issues and define their ideal outcome should be undertaken hand in hand with public health programmes themselves.

Found on 21 October 2021 at <https://theconversation.com/why-ignoring-mental-wellbeing-is-a-risk-to-public-health-40928>

VicHealth evidence review of primary prevention of mental health conditions

A recent (2020) VicHealth review reported on the evidence and efficacy of primary (meaning upstream) mental health prevention approaches. This includes a mix of wellbeing promotion and prevention strategies. It cites 334 papers or studies that support these. The review focusses on reducing risks and creating protective factors such as resilience.

The review notes that:

It is crucial to remember that small improvements across large segments of the population have a much greater impact on reducing incidence than large improvements across a smaller proportion of individuals. (p5)

And concludes that:

- "Most mental health conditions evolve through a series of stages from 'wellness' to subthreshold symptoms, and onto a diagnosable disorder.
- Prevention efforts can target any of these stages to avert progression to the next.
- Primary prevention occurs before the onset of a condition to prevent it from developing.
- Secondary prevention targets the early stages of a condition to reduce its duration or severity.
- Tertiary prevention focuses on lessening a condition's impact on quality of life and longevity.
- A large number of factors exert an influence on the development of mental health conditions.
- Risk factors increase a person's likelihood of experiencing a condition, while protective factors reduce the likelihood.
- Preventing the onset of a mental health condition requires efforts to reduce people's exposure to risk factors and/or increase their exposure to protective factors.

- At least 21% of the disability and premature mortality associated with mental health conditions is preventable in this way." (p6)

Carbone, S. (2020) Evidence review: The primary prevention of mental health conditions. Victorian Health Promotion Foundation, Melbourne.

Community dynamics and better wellbeing

Is there evidence that segments of the population and communities can play a greater role in shaping their own health?

In its 2015 report *Guide to community-centred approaches for health and wellbeing*, the UK NHS stated the following about evidence in this area.

There is a substantial body of evidence on the benefits of community participation and empowerment in addressing the social determinants of health and removing barriers for marginalised and vulnerable groups. A rapid scoping review undertaken to inform this report identified 128 reviews of relevance; 32 of these were systematic reviews.

Most of these reviews report positive outcomes from working with communities, although some also report insufficient evidence to draw firm conclusions or have mixed results. Some reviews point to the importance of avoiding negative effects for those who volunteer and supporting people to engage.

A recent NIHR-funded systematic review and meta-analysis of effectiveness studies provides a comprehensive assessment of community engagement, with 315 included studies grouped into three models: (i) empowerment, (ii) peer/lay models, and (iii) patient/consumer involvement in service development. The conclusions were:

Overall, community engagement interventions are effective in improving health behaviours, health consequences, participant self-efficacy and perceived social support for disadvantaged groups. There are some variations in the observed effectiveness, suggesting that community engagement in public health is more likely to require a 'fit for purpose' rather than 'one size fits all' approach.

There is reasonably strong evidence on the positive impact of social participation, taking part in volunteering and community engagement with a range of benefits reported including better physical and emotional health, increased wellbeing, self-confidence, self-esteem, and social relationships. (p33) (reference footnotes removed)

Published February 2015 PHE publications gateway number: 2014711

The following concept and model of 'Health Creation' from the UK NHS alliance includes a framework for communities to influence their own health, based on grey literature.

Health Creation is the process through which individuals and communities gain a sense of purpose, hope, mastery and control over their own lives and immediate environment; when this happens their health and wellbeing is enhanced.

The 3Cs of Health Creation are Control, Contact, Confidence.

Building meaningful and constructive Contact between people and within communities increases our Confidence which leads to greater Control over our lives and the determinants of our health. People also need an adequate income, a suitable home, engaging occupation and a meaningful future.

Having Control over our lives and environments is proven to enhance health and wellbeing and to help people cope well with health conditions, disability and ageing.

Found on 9 Aug 2021 at <https://www.nhsalliance.org/health-creation/>

Is there evidence that shows segments of the population and communities who engage in mental health promotion and prevention get better mental health outcomes?

There is strong evidence that intentional approaches to improve mental health can be achieved in workplaces.

Research and analysis published by Deloitte in 2019 makes a positive case for investment in mental health by employers, finding an average return of £5 for every £1 spent, up from the £4 to £1 return identified in 2017.

Found on 9 August 2021 at <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/consultancy/deloitte-uk-mental-health-and-employers.pdf>

A systematic meta-review for workplace interventions for common mental disorders found that:

Together, these reviews analysed 481 primary research studies. Moderate evidence was identified for two primary prevention interventions; enhancing employee control and promoting physical activity. Stronger evidence was found for CBT-based stress management although less evidence was found for other secondary prevention interventions, such as counselling. Strong evidence was also found against the routine use of debriefing following trauma. Tertiary interventions with a specific focus on work, such as exposure therapy and CBT based and problem-focused return-to-work programmes, had a strong evidence base for improving symptomology and a moderate evidence base for improving occupational outcomes. Overall, these findings demonstrate there are empirically supported interventions that workplaces can utilize to aid in the prevention of common mental illness as well as facilitating the recovery of employees diagnosed with depression and/or anxiety.

Joyce, S., Modini, M., Christensen, H., Mykletun, A., Bryant, R., Mitchell, P. B., & Harvey, S. B. (January 01, 2016). Workplace interventions for common mental disorders: a systematic meta-review. *Psychological Medicine*, 46, 4, 683-97.

An initiative in Zimbabwe, *Friendship Bench*, found that although there was a lack of mental health services there, respected community members could be trained in CBT methods to prevent mental health problems in the wider population.

Their offices are simple wooden seats, called Friendship Benches, located in the grounds of health clinics around Harare and other major cities in Zimbabwe.

The practitioners are lay health workers known as community 'Grandmothers', trained to listen to and support patients living with anxiety, depression and other common mental disorders.

But the impact, measured in a ground-breaking study, shows that this innovative approach holds the potential to significantly improve the lives of millions of people with moderate and severe mental health problems in countries where access to treatment is limited or nonexistent.

Found on 21 October 2021 on <https://www.grandchallenges.ca/2015/friendship-bench-2/>

A randomised control trial of this programme found that:

Depression and anxiety are common mental disorders globally but are rarely recognized or treated in low-income settings. Task-shifting of mental health care to lay health workers (LHWs) might decrease the treatment gap.

Among individuals screening positive for common mental disorders in Zimbabwe, LHW-administered, primary care-based problem-solving therapy with education and support compared with standard care plus education and support resulted in improved symptoms at 6 months. Scaled-up primary care integration of this intervention should be evaluated.

Effect of a Primary Care-Based Psychological Intervention on Symptoms of Common Mental Disorders in Zimbabwe: A Randomized Clinical Trial Dixon Chibanda, MD; Helen A. Weiss, DPhil; Ruth Verhey, MSc; Victoria Simms, PhD; Ronald Munjoma, SLC; Simbarashe Rusakaniko, PhD; Alfred Chingono, MSc; Epiphania Munetsi, MPhil; Tarisai Bere, BA; Ethel Manda, BSc; Melanie Abas, MD; Ricardo Araya, PhD.

Although this study relates to a low-income setting, it raises the question as to why wealthier countries with rapidly expanding mental health need and demand gaps don't apply some of these principles.

Is there evidence that health-related behaviours can change in a population leading to better health outcomes?

The UK National Institute for Health and Clinical Excellence has considered this question in its guidance notes for behaviour change at population, community and individual levels. It concludes that:

There is overwhelming evidence that changing people's health-related behaviour can have a major impact on some of the largest causes of mortality and morbidity. The Wanless report (Wanless 2004) outlined a position in the future in which levels of public engagement with health are high, and the use of preventive and primary care services are optimised, helping people to stay healthy. This 'fully engaged' scenario, identified in the report as the best option for future organisation and delivery of NHS services, requires changes in behaviours and their social, economic and environmental context to be at the heart of all disease prevention strategies.

Behaviour plays an important role in people's health (for example, smoking, poor diet, lack of exercise and sexual risk-taking can cause a large number of diseases). In addition, the evidence shows that different patterns of behaviour are deeply embedded in people's social and material circumstances, and their cultural context.

Interventions to change behaviour have enormous potential to alter current patterns of disease. A genetic predisposition to disease is difficult to alter. Social circumstances can also be difficult to change, at least in the short to medium term. By comparison, people's behaviour – as individuals and collectively – may be easier to change. However, many attempts to do this have been unsuccessful, or only partially successful. Often, this has been because they fail to take account of the theories and principles of successful planning, delivery and evaluation.

The report also identified gaps in the evidence including:

- Evidence about the cost-effectiveness of behaviour change evaluations is lacking, in particular, in relation to specific sub-groups (for example, 19–30 year olds, low-income groups and particular ethnic and disadvantaged groups).
- Evaluations of behaviour change interventions frequently fail to make a satisfactory link to health outcomes. Clear, consistent outcome measures need developing.
- Evaluations of interventions based on specific psychological models tend not to relate the outcome measures to the model. As a result, it is difficult to assess the appropriateness of using the model as a means of describing behaviour change.
- Few studies explicitly address the comparative effect that behaviour change interventions can have on health inequalities, particularly in relation to cultural differences.
- There is a need for more information on the links between knowledge, attitudes and behaviour. Conflation between them should be avoided.
- There is a lack of reliable data from which to extrapolate the long-term health outcomes of behaviour change interventions.

National Institute for Health and Clinical Excellence., & Great Britain. (2007). *Behaviour change at population, community and individual levels*. London: NICE.

Aotearoa New Zealand examples

The *Farmstrong* farmer and grower wellbeing programme and the *All Right?* campaign both show evidence of people changing their behaviour towards more healthy psychological responses.

Farmstrong

Although not yet formally peer reviewed, data collected from *Farmstrong* shows that 20% of New Zealand farmers and growers attribute an increase in their wellbeing to the programme.

<https://farmstrong.co.nz/wp-content/uploads/2020/01/Farmstrong-Four-Year-Report-Final-web-3.pdf>

All Right?

The campaign's latest evaluation in 2020 found the following in relation to wellbeing:

Of those who were aware of *All Right?*, over four-fifths (86%) of greater Christchurch respondents in 2020 agreed that it was helpful. Over forty percent (42%) had done activities as a result of *All Right?.*'

Found on 11 August 2021 at <https://www.allright.org.nz/uploads/files/AllRightSummary2020.pdf>

Does increasing mental wellbeing lead to better societal outcomes overall?

Recent research supports wider evidence that increasing mental wellbeing reduces burden on healthcare and benefits systems:

The results of the present study support and expand prior findings in that population mental well-being predicts future expenditure (expressed in USD PPP) pertaining to healthcare costs and sickness benefit transfers. Higher mental well-being (on a continuous scale) in 2016 was associated with lower costs in 2017, i.e., each point increase in mental well-being was associated with lower healthcare costs (\$- 42.5, 95% CI = \$- 78.7, \$- 6.3) and lower costs in terms of sickness benefit transfers (\$- 23.1, 95% CI = \$- 41.9, \$- 4.3) per person in 2017. The relationship was linear, implying that moving from low to high mental well-being across the entire continuum is associated with considerable cost savings. The results were robust when considering differences in sociodemographics, psychiatric and somatic health status, as well as health behavior.

Universal mental health promotion initiatives that focus on moving all segments of the population towards higher levels of mental well-being could free up resources and reduce costs in the short term, potentially being cost neutral, as well as generate cost savings for society in the longer term.

Santini, Z.I., Becher, H., Jørgensen, M.B. *et al.* Economics of mental well-being: a prospective study estimating associated health care costs and sickness benefit transfers in Denmark. *Eur J Health Econ* 22, 1053–1065 (2021). <https://doi.org/10.1007/s10198-021-01305-0>

A Welsh Report, *Promoting mental health and preventing mental illness: the economic case for investment in Wales*, found extensive evidence to recommend:

- Supporting parents and early years: parenting skills training/pre-school education/home learning environment;
- Supporting lifelong learning: health promoting schools and continuing education;
- Improving working lives: employment/workplace;
- Positive steps for mental health: lifestyle (diet, exercise, sensible drinking) and social support;
- Supporting communities: environmental improvements.

Although the evidence is incomplete in some cases, these areas of intervention appear to offer the most favourable balance of effectiveness, scale of potential benefit and likely cost of implementation. They demonstrate that all sectors have a role to play in improving mental health and the need for interventions that involve individuals and communities, but also those that address structural barriers to mental health and wellbeing. (p5)

Found on 11 August 2021 at https://www.centreformentalhealth.org.uk/sites/default/files/2018-09/Promoting_mental_health_Wales.pdf

Is there evidence that social marketing can be used to improve public health?

A 2006 article describes “three reviews of systematic reviews and primary studies that evaluate social marketing effectiveness. All three reviews used pre-defined search and inclusion criteria and defined social marketing interventions as those which adopted six key social marketing principles.”

The reviews provide evidence that social marketing interventions can be effective in improving diet, increasing exercise, and tackling the misuse of substances like alcohol, tobacco, and illicit drugs. There is evidence that social marketing interventions can work with a range of target groups, in different settings, and can work upstream as well as with individuals.

Gordon R, McDermott L, Stead M, Angus K. The effectiveness of social marketing interventions for health improvement: what's the evidence? *Public Health*. 2006 Dec;120(12):1133-9. doi: 10.1016/j.puhe.2006.10.008. Epub 2006 Nov 13. PMID: 17095026.

Mass media campaigns

Mass media campaigns are widely used to expose high proportions of large populations to messages through routine uses of existing media, such as television, radio, and newspapers. Exposure to such messages is, therefore, generally passive. Such campaigns are frequently competing with factors, such as pervasive product marketing, powerful social norms, and behaviours driven by addiction or habit. In this Review we discuss the outcomes of mass media campaigns in the context of various health-risk behaviours (eg, use of tobacco, alcohol, and other drugs, heart disease risk factors, sex-related behaviours, road safety, cancer screening and prevention,

child survival, and organ or blood donation). We conclude that mass media campaigns can produce positive changes or prevent negative changes in health-related behaviours across large populations.

Wakefield, M. A., Loken, B., & Hornik, R. C. (2010). Use of mass media campaigns to change health behaviour. *Lancet* (London, England), 376(9748), 1261–1271. [https://doi.org/10.1016/S0140-6736\(10\)60809-4](https://doi.org/10.1016/S0140-6736(10)60809-4)

Is there evidence for community engagement and empowerment approaches to improving health?

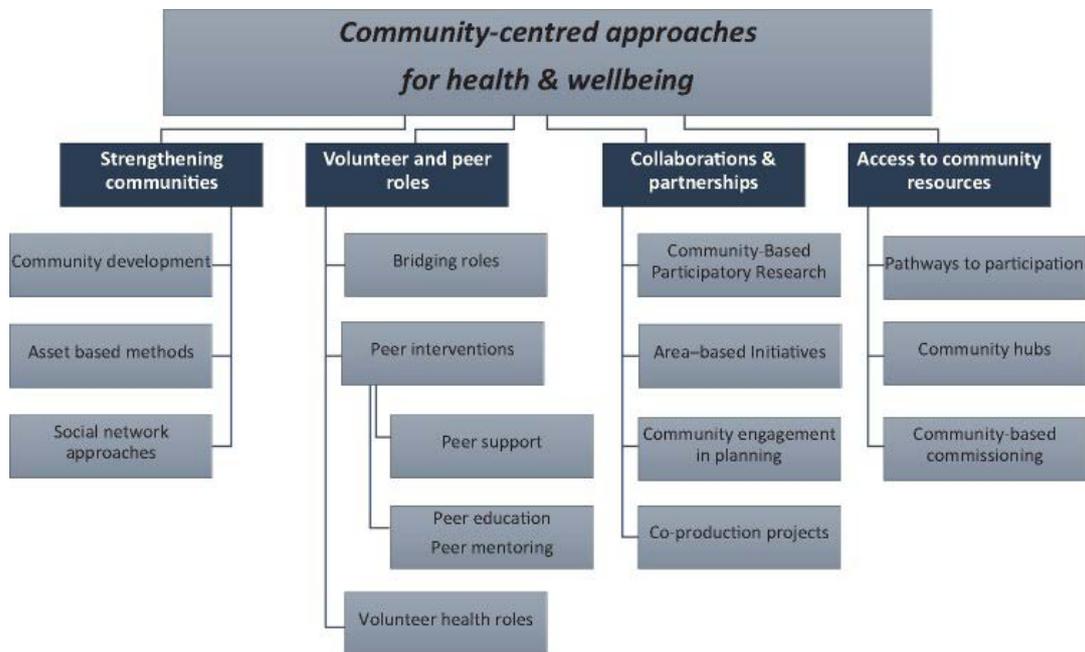
A synthesis report from the WHO on the effectiveness of empowerment strategies to improve health and reduce health disparities found that:

Only a few researchers have used designs resulting in evidence ranked as strong in the traditional evidence grading systems. Yet there is evidence based on multi-level research designs that empowering initiatives can lead to health outcomes and that empowerment is a viable public health strategy. Much research has been focused on empowerment of socially excluded populations (e.g., women, youth, people at risk for HIV/AIDS, and the poor), though application of empowerment crosses to other populations and issues in public health. Youth empowerment interventions have produced multiple empowerment and health outcomes: strengthened self- and collective efficacy, stronger group bonding, formation of sustainable youth groups, increased participation in structured activities including youth social action, and policy changes, leading to improved mental health and school performance.

Health Evidence Network., & World Health Organization. (2006). *What is the evidence on effectiveness of empowerment to improve health?*. Copenhagen, Denmark: World Health Organization, Regional Office for Europe.

Evidence-based framework on community-centred approaches for health

South et. al have devised an evidence-based framework on community-centred approaches for health, as outlined below:



South J, Bagnall AM, Stansfield JA, Southby KJ, Mehta P. An evidence-based framework on community-centred approaches for health: England, UK. *Health Promot Int.* 2019 Apr 1;34(2):356–366. [doi: 10.1093/heapro/dax083](https://doi.org/10.1093/heapro/dax083). PMID: 29206912; PMCID: PMC6445340.

An evidence-based guide developed by the UK Behavioural Insights Team for the UK Health Foundation found numerous ways behaviour can benefit health. Excerpts from the guide are copied below:

The benefits of thinking about behaviour and person- and community-centred approaches

People's behaviour strongly influences their health. However, even when people know what the 'healthy' thing to do is, and intend to do it, they often encounter significant barriers. Awareness and intention are rarely enough; we need to find other ways of helping people change their behaviour. The challenge for practitioners is to identify the most effective ways of supporting people to make these changes, and ensuring that they become sustainable.

The potential gains from helping people manage their own health using person- and community-centred approaches are great. These approaches represent a source of untapped value for the health system. If developed effectively, systematic evidence reviews of self-management programmes suggest they can result in raised self-confidence, better quality of life, improved clinical outcomes, and greater achievement of goals that are important to the person.

Helping people to help themselves could also result in more meaningful interactions between people with long-term health conditions and their practitioners. Where practitioners have the sense that they are sustainably supporting people to live life in a fulfilling way, they are likely to experience increased job satisfaction.

The challenge of spreading new approaches

The evidence for the benefits of promoting a person- and community-centred approach in health and wellbeing settings is strengthening. Yet spreading improvement and change within health and social care organisations is notoriously challenging. Behavioural science offers some reasons for why this is the case:

- People tend to be confronted with much more information than they are willing or able to process.
- People seek to minimise effort and are disproportionately affected by small barriers to change.
- People typically stick with the way things are – the status quo.
- People tend to interpret facts using mental 'shortcuts' (rules of thumb or assumptions) that confirm our existing views.

These factors mean that efforts which try to affect behaviour change primarily by sharing ever more information are likely to flounder.

1. A framework for understanding and changing behaviour

The UK's Behavioural Insights Team (BIT) has worked with public sector policymakers and practitioners over the last five years to develop the EAST framework, which is an accessible way of applying behavioural science to real-world issues. The core message of EAST is that if you want to encourage a behaviour, you should make it Easy, Attractive, Social and Timely.

- **Make it Easy:** Small, seemingly irrelevant, details that make a task more challenging or effortful can make the difference between doing something and putting it off – sometimes indefinitely.
- **Make it Attractive:** Attracting attention and incentivising behaviour are important for prompting people to behave in a new way and maintain behaviour change.
- **Make it Social:** People are social creatures; we are influenced by what those around us do and say, often more than we are consciously aware of.
- **Make it Timely:** The same offer or 'prompt' to change behaviour made at different times can have different effects.

Spreading change. A guide to enabling the spread of person- and community-centred approaches for health and wellbeing. Guide September 2016. Found on 9 Aug 2021 at <https://www.health.org.uk/sites/default/files/RtVSpreadingChange.pdf>

There is growing evidence to indicate that health systems (in the broader sense of the word health) have significant potential to change health behaviours and improve health.

Harnessing and utilising health systems to prevent – rather than, or in addition to, treating conditions and illnesses – may also lead to significant cost savings. This report presents the findings from three rapid research projects. It is based on learning gleaned from different types of evidence considered during development of public health guidance by the National Institute for Health and Clinical Excellence (NICE).

Health systems can be defined as the sum of the people, institutions and resources arranged together (in accordance with relevant policies) to maintain and improve the health of the population they serve. A health system is also responsive to people's legitimate expectations, protects them against the cost of ill health through a variety of activities, and has the primary aim of population health improvement at its heart (WHO 2005: www.who.int/features/qa/28/en) (p1)

Swann, C., & National Institute for Health and Clinical Excellence (Great Britain). (2009). *Health systems and health-related behaviour change: A review of primary and secondary evidence*. London: National Institute for Health and Clinical Excellence

Is there evidence that emotions and behaviours are contagious in populations, and if so, can this dynamic be used to spread mental wellbeing?

Alone in the crowd: The structure and spread of loneliness in a large social network

Results indicated that loneliness occurs in clusters, extends up to three degrees of separation, is disproportionately represented at the periphery of social networks, and spreads through a contagious process. The spread of loneliness was found to be stronger than the spread of perceived social connections, stronger for friends than family members, and stronger for women than for men. The results advance our understanding of the broad social forces that drive loneliness and suggest that efforts to reduce loneliness in our society may benefit by aggressively targeting the people in the periphery to help repair their social networks and to create a protective barrier against loneliness that can keep the whole network from unraveling.

Cacioppo, John T., James H. Fowler, and Nicholas Alexander Christakis. 2009. Alone in the crowd: The structure and spread of loneliness in a large social network. *Journal of Personality and Social Psychology* 97(6): 977–991.

Social networks can motivate people to exercise more

The influence of our social networks can be a powerful motivator to encourage more physical activity, say researchers in a (2015) report. What this new study reveals is that these same positive behavior signals are also powerful in our online networks, and can be harnessed for the social good. This approach could be applied not only to encourage exercise, but also to promote vaccinations, medication compliance, and preventative care.

<https://www.sciencedaily.com/releases/2015/10/151007110738.htm>

Jingwen Zhang, Devon Brackbill, Sijia Yang, Damon Centola. Efficacy and causal mechanism of an online social media intervention to increase physical activity: Results of a randomized controlled trial. *Preventive Medicine Reports*, 2015; 2: 651 DOI: [10.1016/j.pmedr.2015.08.005](https://doi.org/10.1016/j.pmedr.2015.08.005)

Another study found:

Our analysis of the precisely recorded daily exercise patterns of over a million people who ran over 350 million (M) km in a global social network of runners over 5 years showed that exercise is socially contagious and that its contagiousness varies with the relative activity levels of and gender relationships between friends. Less active runners influence more active runners, while the reverse is not true. Both men and women influence men, while only women influence other women. While the Embeddedness and Structural Diversity theories of social contagion explain the influence effects we observed, evidence for the Complex Contagion theory is mixed.

Aral, S., Nicolaides, C. Exercise contagion in a global social network. *Nat Commun* 8, 14753 (2017). <https://doi.org/10.1038/ncomms14753>

Efficacy of increasing wellbeing to counter poor mental health

Is there evidence to show that mental health can be positively affected through modified behavioural patterns of individuals and communities?

Some examples of some of the wellbeing interventions that improve mental health and build resilience protecting against mental disorder are listed below.

This builds on evidence supporting the Five Ways to Wellbeing compiled by the New Economics Foundation review of the UK Government Foresight Project on communicating the evidence base for improving people's wellbeing.

Found on 25 Aug 21 at https://b3cdn.net/nefoundation/8984c5089d5c2285ee_t4m6bhqq5.pdf

Exercise

One effective wellbeing behaviour that improves mental health is exercise. The following list of references was compiled by *Helpguide*, a Harvard Medical School-associated mental health self-help website.

Greer, T. L., Trombello, J. M., Rethorst, C. D., Carmody, T. J., Jha, M. K., Liao, A., Grannemann, B. D., Chambliss, H. O., Church, T. S., & Trivedi, M. H. (2016). Improvements in psychosocial functioning and health-related quality of life following exercise augmentation in patients with treatment response but non-remitted major depressive disorder: Results from the TREAD study. *Depression and Anxiety*, 33(9), 870–881. <https://doi.org/10.1002/da.22521>

Kandola, A., Vancampfort, D., Herring, M., Rebar, A., Hallgren, M., Firth, J., & Stubbs, B. (2018). Moving to Beat Anxiety: Epidemiology and Therapeutic Issues with Physical Activity for Anxiety. *Current Psychiatry Reports*, 20(8), 63. <https://doi.org/10.1007/s11920-018-0923-x>

Aylett, E., Small, N., & Bower, P. (2018). Exercise in the treatment of clinical anxiety in general practice – a systematic review and meta-analysis. *BMC Health Services Research*, 18(1), 559. <https://doi.org/10.1186/s12913-018-3313-5>

Stubbs, B., Vancampfort, D., Rosenbaum, S., Firth, J., Cosco, T., Veronese, N., Salum, G. A., & Schuch, F. B. (2017). An examination of the anxiolytic effects of exercise for people with anxiety and stress-related disorders: A meta-analysis. *Psychiatry Research*, 249, 102–108. <https://doi.org/10.1016/j.psychres.2016.12.020>

Kandola, A. A., Osborn, D. P. J., Stubbs, B., Choi, K. W., & Hayes, J. F. (2020). Individual and combined associations between cardiorespiratory fitness and grip strength with common mental disorders: A prospective cohort study in the UK Biobank. *BMC Medicine*, 18(1), 303. <https://doi.org/10.1186/s12916-020-01782-9>

Found on 11 Aug 2021 at <https://www.helpguide.org/articles/healthy-living/the-mental-health-benefits-of-exercise.htm#>

Good quality sleep

According to the Harvard Medical School, "Although scientists are still trying to tease apart all the mechanisms, they've discovered that sleep disruption – which affects levels of neurotransmitters and stress hormones, among other things – wreaks havoc in the brain, impairing thinking and emotional regulation. In this way, insomnia may amplify the effects of psychiatric disorders, and vice versa."

Found at https://www.health.harvard.edu/newsletter_article/sleep-and-mental-health

The following large study considered the effects of improving sleep on mental health.

Described as "the largest randomised controlled trial of a psychological intervention for a mental health problem. It provides strong evidence that insomnia is a causal factor in the occurrence of psychotic experiences and other mental health problems."

Freeman, Daniel, Sheaves, Bryony, Goodwin, Guy M, Yu, Ly-Mee, Nickless, Alecia, Harrison, Paul J, Emsley, Richard, ... Et, Al. (2017). *The effects of improving sleep on mental health (OASIS): a randomised controlled trial with mediation analysis*. Elsevier.

Another review also found that there is “converging evidence for sleep disturbances as an empirical risk factor for suicidal behaviors”.

Bernert RA, Kim JS, Iwata NG, Perlis ML. Sleep disturbances as an evidence-based suicide risk factor. *Curr Psychiatry Rep*. 2015 Mar;17(3):554. doi: 10.1007/s11920-015-0554-4. PMID: 25698339; PMCID: PMC6613558.

Volunteering

When not considering age, those who engaged in volunteering regularly appeared to experience higher levels of mental well-being than those who never volunteered.

Tabassum F, Mohan J, Smith P Association of volunteering with mental well-being: a lifecourse analysis of a national population-based longitudinal study in the UK *BMJ Open* 2016;6:e011327. doi: 10.1136/bmjopen-2016-011327

Using first-difference estimation within the British Household Panel Survey and Understanding Society longitudinal panel datasets (10 waves spanning about 20 years), we are able to control for higher prior levels of wellbeing of those who volunteer, and to produce the most robust quasi-causal estimates to date by ensuring that volunteering is associated not just with a higher wellbeing a priori, but with a positive change in wellbeing.

Lawton, R.N., Gramatki, I., Watt, W. et al. Does Volunteering Make Us Happier, or Are Happier People More Likely to Volunteer? Addressing the Problem of Reverse Causality When Estimating the Wellbeing Impacts of Volunteering. *J Happiness Stud* 22, 599–624 (2021). <https://doi.org/10.1007/s10902-020-00242-8>

Affirming cultural identity

Parata and Gifford found that their research “confirms previous findings demonstrating a positive association between cultural attachment and wellbeing, and further defines the role of ahi kā, providing a framework for iwi planning by describing the intergenerational, assimilated and multifunctional nature of ahi kā.”

Parata, K., & Gifford, H. (January 01, 2017). “It’s good for me and my whānau”: Marae participation as a springboard for oranga. *Mai Journal: a New Zealand Journal of Indigenous Scholarship*, 6, 1.

Muriwai et.al. found that “Māori with a higher level of Cultural Efficacy showed greater psychological resilience. In contrast, increased rates of psychological distress were documented amongst those who were lower in Cultural Efficacy and this effect was most pronounced among individuals who identified solely as Māori. Our results support a ‘culture-as-cure’ perspective and indicate that increased Māori Cultural Efficacy has a direct protective effect for those who may be at risk of negative psychological outcomes and associated risk factors.”

Culture as Cure? The Protective Function of Māori Cultural Efficacy on Psychological Distress Emerald Muriwai, Carla A. Houkamau, Chris G. Sibley. *New Zealand Journal of Psychology* Vol. 44 No. 2, September 2015

Rangatahi Tū Rangatira (R2R) is a national health promotion programme in Aotearoa New Zealand which aims to promote cultural and physical wellbeing for rangatahi (young people) and their whānau (family). Grounded in tikanga Māori, the programme focuses on total wellbeing, leadership and cultural awareness, providing rangatahi opportunities to increase their participation in physical activity and cultural knowledge through ngā taonga tākarō (Māori ancestral games). This paper focuses on an evaluation of this innovative health promotion programme focussing on the delivery of R2R by a local iwi provider in a rural area. Kanohi ki te kanohi (face-to-face) interviews and focus groups were used to collect data from a range of stakeholders including rangatahi, whānau, programme developers, and collaborating community organisations. A whānau ora (holistic) framework incorporating five core outcomes and key indicators specific to the programme was developed to assess the impact of delivery. Results demonstrated that rangatahi and their whānau were living healthier lifestyles through being more physically active; had gained an increased desire to succeed in their education and extra curriculum activities; and felt more connected to their community and te ao Māori. This demonstrates the importance of incorporating cultural elements to support improved lifestyle changes for rangatahi and their whānau and the connection between enhanced cultural identity and good health.

Severinsen, C., & Reweti, A. (2019). Rangatahi Tū Rangatira: Innovative health promotion in Aotearoa New Zealand. *Health Promotion International*, 34(2), 291–299. <https://doi.org/10.1093/heapro/dax075>

Māori youth who have a strong cultural identity were more likely to experience good mental health outcomes. Discrimination has a serious negative impact on Māori youth mental health. Our findings suggest that programmes, policies and practice that promote strong cultural identities and eliminate ethnic discrimination are required to improve mental health equity for Māori youth.

Williams, A. D., Clark, T. C., & Lewycka, S. (2018). The Associations Between Cultural Identity and Mental Health Outcomes for Indigenous Māori Youth in New Zealand. *Frontiers in Public Health*, 6. <https://doi.org/10.3389/fpubh.2018.00319>

Creating an Indigenous, Māori-centred model of relational health: A literature review of Māori models of health

This study highlights the importance and relevance of relational approaches to engaging Māori and their whānau accessing health services. It signals the necessary foundations for health practitioners to build trust-based relationships with Māori. Key elements for a Māori-centred model of relational care include whakawhanaungatanga (the process of building relationships) using tikanga (cultural protocols and processes) informed by cultural values of aroha (compassion and empathy), manaakitanga (kindness and hospitality), mauri (binding energy), wairua (importance of spiritual wellbeing). Relevance to clinical practice Culturally-based models of health and wellbeing provide indicators of important cultural values, concepts and practices and processes. These can then inform the development of a Māori-centred relational model of care to address inequity.

Wilson, D., Moloney, E., Parr, J. M., Aspinall, C., & Slark, J. (n.d.). Creating an Indigenous Māori-centred model of relational health: A literature review of Māori models of health. *Journal of Clinical Nursing*, n/a(n/a). <https://doi.org/10.1111/jocn.15859>

Mentally healthy thinking

A recent review of the evidence for cognitive behavioural therapy as a treatment for depression suggests that this may be more effective through group and self-help approaches. This might make it amenable to community as well as clinical settings.

Whitfield, G., & Williams, C. (2003). The evidence base for cognitive-behavioural therapy in depression: Delivery in busy clinical settings. *Advances in Psychiatric Treatment*, 9(1), 21-30. doi:10.1192/apt.9.1.21

Reducing excessive stress to improve mental health

Is there evidence that excessive social and personal stress leads to risk of mental illness?

It is well known that first depressive episodes often develop following the occurrence of a major negative life event (Paykel 2001). Furthermore, there is evidence that stressful life events are causal for the onset of depression (see Hammen 2005, Kendler et al. 1999). A study of 13,006 patients in Denmark, with first psychiatric admissions diagnosed with depression, found more recent divorces, unemployment, and suicides by relatives compared with age- and gender-matched controls (Kessing et al. 2003). The diagnosis of a major medical illness often has been considered a severe life stressor and often is accompanied by high rates of depression (Cassem 1995). For example, a meta-analysis found that 24% of cancer patients are diagnosed with major depression (McDaniel et al. 1995).

Stressful life events often precede anxiety disorders as well (Faravelli & Pallanti 1989, Finlay-Jones & Brown 1981). Interestingly, long-term follow-up studies have shown that anxiety occurs more commonly before depression (Angst & Vollrath 1991, Breslau et al. 1995). In fact, in prospective studies, patients with anxiety are most likely to develop major depression after stressful life events occur (Brown et al. 1986).

Schneiderman, N., Ironson, G., & Siegel, S. D. (2005). Stress and health: psychological, behavioral, and biological determinants. *Annual review of clinical psychology*, 1, 607-628. <https://doi.org/10.1146/annurev.clinpsy.1.102803.144141>

What is the evidence for non-medical approaches to stress reduction that could be learned in community settings?

Complementary stress reduction techniques

The following highlighted section is copied from the US National Institute of Health and outlines a wide range of evidence-based stress reduction techniques that could be applied with minimal if any clinical oversight.

The National Center for Complementary and Integrative Health (NCCIH) is the Federal Government's lead agency for scientific research on [complementary and integrative health approaches](#). We are 1 of the 27 institutes and centers that make up the [National Institutes of Health \(NIH\)](#) within the [U.S. Department of Health and Human Services](#)

The **mission** of NCCIH is to determine, through rigorous scientific investigation, the fundamental science, usefulness, and safety of complementary and integrative health approaches and their roles in improving health and health care.

NCCIH's **vision** is that scientific evidence informs decision making by the public, health care professionals, and health policymakers regarding the integrated use of complementary health approaches in a whole person health framework.

Mind and body approaches for stress and anxiety: What the science says

April 2020

Clinical guidelines, scientific literature, info for patients:

[Mind and Body Approaches for Stress and Anxiety](#)

Relaxation techniques

Relaxation techniques may be helpful in managing a variety of stress-related health conditions, including anxiety associated with ongoing health problems and in those who are having medical procedures. Evidence suggests that relaxation techniques may also provide some benefit on symptoms of post-traumatic stress disorder (PTSD) and may help reduce occupational stress in health care workers. For some of these conditions, relaxation techniques are used as an adjunct to other forms of treatment.

What does the research show?

Biofeedback for anxiety and depression in children. A [2018 systematic review](#) included 9 studies – 278 participants total – on biofeedback for anxiety and depression in children and adolescents with long-term physical conditions such as chronic pain, asthma, cancer, and headache. The review found that, although biofeedback appears promising, at this point it can't be recommended for clinical use in place of or in addition to current treatments.

Heart rate variability (HRV) biofeedback. A [2017 meta-analysis](#) looked at 24 studies – 484 participants total – on heart rate variability (HRV) biofeedback and general stress and anxiety. The meta-analysis found that HRV biofeedback is helpful for reducing self-reported stress and anxiety, and the researchers saw it as a promising approach with further development of wearable devices such as a fitness tracker.

Progressive muscle relaxation. A [2015 systematic review](#), which included two studies on progressive muscle relaxation in adults over the age of 60, with a total of 275 participants, found that progressive muscle relaxation was promising for reducing anxiety and depression. The positive effects for depression were maintained 14 weeks after treatment.

Anxiety after stroke. A [2017 Cochrane review](#) included one study on 21 community-dwelling stroke survivors with diagnosed anxiety. The participants used a relaxation CD five times a week for a month, and after 3 months, the participants had reduced anxiety. The reviewers concluded that there is insufficient evidence to guide the treatment of anxiety after stroke.

PTSD. A [2018 meta-analysis](#) of 50 studies involving 2,801 participants found that relaxation therapy seemed to be less effective than cognitive behavioral therapy for post-traumatic stress disorder and obsessive-compulsive disorder. No difference was found between relaxation therapy and cognitive behavioral therapy for other anxiety disorders, including generalized anxiety disorder, panic disorder, social anxiety disorder, and specific phobias. The review noted, however, that most studies had a high risk of bias, and there was a small number of studies for some of the individual disorders.

Safety

Relaxation techniques are generally considered safe for healthy people. In most research studies, there have been no reported negative side effects. However, occasionally, people report negative experiences such as increased anxiety, intrusive thoughts, or fear of losing control.

There have been rare reports that certain relaxation techniques might cause or worsen symptoms in people with epilepsy or certain psychiatric conditions, or with a history of abuse or trauma.

Yoga, Tai Chi, and Qi Gong

A range of research has examined the relationship between exercise and depression. Results from a much smaller body of research suggest that exercise may also affect stress and anxiety symptoms. Even less certain is the role of yoga, tai chi, and qi gong – for these and other psychological factors, but there is some limited evidence that yoga, as an adjunctive therapy, may be helpful for people with anxiety symptoms.

What does the research show?

Yoga for children and adolescents. A [2020 systematic review](#) of 27 studies involving the effects of yoga on children and adolescents with varying health statuses found that in studies assessing anxiety and depression, 58 percent showed reductions in both symptoms, while 25 percent showed reductions in anxiety only. Additionally, 70 percent of studies included in the review that assessed anxiety alone showed improvements. However, the reviewers noted that the studies included in the review were of weak to moderate methodological quality.

Yoga, tai chi, and qi gong for anxiety. A [2019 review](#) concluded that yoga as an adjunctive therapy facilitates treatment of anxiety disorders, particularly panic disorder. The review also found that tai chi and qi gong may be helpful as adjunctive therapies for depression, but effects are inconsistent.

Yoga for anxiety. A [2018 systematic review and meta-analysis](#) of 8 studies of yoga for anxiety (involving 319 participants with anxiety disorders or elevated levels of anxiety) found evidence that yoga might have short-term benefits in reducing the intensity of anxiety. However, when only people with diagnosed anxiety disorders were included in the analysis, there was no benefit. In a [2013 systematic review](#) of 23 studies (involving 1,722 participants) of yoga for anxiety associated with life situations, yoga seemed to be helpful in some instances but not others. In general, results were more favorable for interventions that included at least 10 yoga sessions. The studies were of medium to poor quality, so definite conclusions about yoga's effectiveness couldn't be reached.

Safety

Yoga is generally considered a safe form of physical activity for healthy people when performed properly, under the guidance of a qualified instructor. However, as with other forms of physical activity, injuries can occur. The most common injuries are sprains and strains. Serious injuries are rare. The risk of injury associated with yoga is lower than that for higher impact physical activities.

Older people may need to be particularly cautious when practicing yoga. The rate of yoga-related injuries treated in emergency departments is higher in people age 65 and older than in younger adults.

Meditation and mindfulness-based stress reduction

Some research suggests that practicing meditation may reduce blood pressure, anxiety and depression, and insomnia.

What does the research show?

Mindfulness-based meditation. A [2019 review](#) concluded that as monotherapy or an adjunctive therapy, mindfulness-based meditation has positive effects on depression, and its effects can last for six months or more. Although positive findings are less common in people with anxiety disorders, the evidence supports adjunctive use. A [2014 meta-analysis](#) of 47 trials in 3,515 participants suggests that mindfulness meditation programs show moderate evidence of improving anxiety and depression. But the researchers found no evidence that meditation changed health-related behaviors affected by stress, such as substance abuse and sleep.

Mindfulness-based programs for workplace stress. A [2018 systematic review and meta-analysis](#) of nine studies that examined mindfulness-based programs with an employee sample, which targeted workplace stress or work engagement, and measured a physiological outcome. The review found that mindfulness-based interventions may be a promising avenue for improving physiological indices of stress.

Meditation for patients with breast cancer. [Clinical practice guidelines](#) issued in 2014 by the Society for Integrative Oncology (SIO) recommend meditation as supportive care to reduce stress, anxiety, depression, and fatigue in patients treated for breast cancer. Meditation, yoga, and relaxation with imagery are recommended for routine use for common conditions, including anxiety and mood disorders (Grade A). Stress management, yoga, massage, music therapy, energy conservation, and meditation are recommended for stress reduction, anxiety, depression, fatigue, and quality of life (Grade B).

Safety

Meditation is generally considered to be safe for healthy people.

A [2019 review](#) found no apparent negative effects of mindfulness-based interventions, and concluded that their general health benefits justify their use as adjunctive therapy for patients with anxiety disorders.

References

Chugh-Gupta N, Baldassarre FG, Vrkljan BH. A systematic review of yoga for state anxiety: Considerations for occupational therapy. *Canadian Journal of Occupational Therapy*. 2013;80(3):150-170.

Cramer H, Lauche R, Anheyer D, et al. Yoga for anxiety: a systematic review and meta-analysis of randomized controlled trials. *Depress Anxiety*. 2018;35(9):830-843.

Goessl VC, Curtiss JE, Hofmann SG. The effect of heart rate variability of biofeedback training on stress and anxiety: a meta-analysis. *Psychological Medicine*. 2017;47(15):2578-2586.

Goyal M, Singh S, Sibinga EM, et al. Meditation programs for psychological stress and well-being: a systematic review and meta-analysis. *JAMA Intern Med*. 2014;174(3):357-368.

Greenlee H, Balneaves LG, Carlson LE, et al. Clinical practice guidelines on the use of integrative therapies as supportive care in patients treated for breast cancer. *J Natl Cancer Inst Monogr*. 2014;50:346-358.

Heckenberg RA, Eddy P, Kent S, et al. Do workplace-based mindfulness meditation programs improve physiological indices of stress? A systematic review and meta-analysis. *J Psychosom Res*. 2018;114:62-71.

James-Palmer A, Anderson EZ, Zucker L, et al. Yoga as an intervention for the reduction of symptoms of anxiety and depression in children and adolescents: a systematic review. *Front Pediatr*. 2020; 8:78.

Klainin-Yobas P, Oo WN, Suzanne Yew PY, et al. Effects of relaxation interventions on depression and anxiety among older adults: a systematic review. *Aging and Mental Health*. 2015;19(12):1043-1055.

Knapp P, Campbell Burton CA, Holmes J, et al. Interventions for treating anxiety after stroke. *Cochrane Database of Systematic Reviews*. 2017;(5):CD008860.

Montero-Marin J, Garcia-Campayo J, López-Montoyo A, et al. Is cognitive-behavioural therapy more effective than relaxation therapy in the treatment of anxiety disorders? A meta-analysis. *Psychological Medicine*. 2018;48(9):1427-1436.

Saeed SA, Cunningham K, Bloch RM. Depression and anxiety disorders: benefits of exercise, yoga, and meditation. *Am Fam Physician*. 2019;99(10):620-627.

Thabrew H, Ruppeldt P, Sollers JJ. Systematic review of biofeedback interventions for addressing anxiety and depression in children and adolescents with long-term physical conditions. *Applied Psychophysiology and Biofeedback*. 2018;43(3):179-192.

<https://www.nccih.nih.gov/health/providers/digest/mind-and-body-approaches-for-stress-science>

The relevance of mental wellbeing for people experiencing mental illness

Is there evidence to show that increasing wellbeing is relevant to recovery from mental illness?

A *Five Ways to Wellbeing* programme was developed for people admitted to an acute psychiatric service.

The five ways of wellbeing program so developed has shown statistically effective in promotion of Mental Wellbeing state and personal Hope among the clients with severe mental illness during their acute admission phase.

Ng, S. S. W., Leung, T. K. S., Cheng, E. K. N., Chan, F. S. M., Chan, J. Y. H., Poon, D. F., Lo, A. W. Y., ... SpringerLink (Online service). (2015). *Efficacy of 'Five Ways to Well-being Program' in Promotion of Mental Wellbeing for Persons Admitted to Acute Psychiatric Service*. (Journal of psychosocial rehabilitation and mental health.)

Research looking at the *All Right?* post Christchurch Earthquake wellbeing campaign concluded that population-wide wellbeing campaigns in the post-disaster context, when done well, can positively impact the wellbeing of the overall population, including mental health service users.

Calder, K., Begg, A., D'Aeth, L., Turner, S., Fox, C., Nobes, B., Pope, K., ... Bell, C. (June 30, 2021). Evaluation of the All Right? Campaign for tangata whaiora/mental health service users in Canterbury, New Zealand. *Health Promotion International*.

A Western Australian study tested the effect of a mental health promotion campaign with people diagnosed with a mental illness.

To determine the impact of the Act-Belong-Commit mental health promotion campaign on people with a diagnosed mental illness or who had sought professional help for a mental health problem in the previous 12 months.

Method: In 2013 and 2014, 1,200 adults in Western Australia were interviewed by telephone. The questionnaire measured campaign reach, impact on beliefs about mental health and mental illness and behavioural impact.

Results: Campaign impact on changing the way respondents thought about mental health was significantly higher among those with a mental illness or who had sought help (41.4% vs 24.2%; $p < 0.001$), as was doing something for their mental health as a result of their exposure to the campaign (20.5% vs 8.7%; $p < 0.001$).

Conclusions: The campaign appears to empower people with a mental illness or who recently sought help to take steps of their own to enhance their mental health.

Donovan, R., Jalleh, G., Robinson, K. and Lin, C. (2016) Impact of a population-wide mental health promotion campaign on people with a diagnosed mental illness or recent mental health problem. *Australian and New Zealand Journal of Public Health*, 40, 274–275

Other issues relating to evidence

What is the consistency of evidence for existing psychological therapies?

For context, it is useful compare the current state of evidence for existing clinically-delivered psychological treatments. A 2017 review that considered this question found:

This study is the first to compare evidence provided by four leading international organizations on different psychological treatments for the principal adult mental disorders. From the main findings, it should be highlighted that there is no consensus regarding the evidence presented to support the effectiveness of psychological treatments for most mental disorders in adults. The therapies based on cognitive behavioral models are those that have shown higher levels of evidence. In addition, although there are numerous treatments for many of the disorders mentioned (e.g., 23 treatments for depression), not all offer the same quality of evidence or studies to support them. As a result, we need to contribute to improving the quality of RCTs through more independent studies that promote and contemplate reproducibility as a much more important criterion than envisaged so far.

Finally, as regards the comparison, we found that while similar evidence exists for some disorders (e.g., bulimia nervosa), for others there is a significant number of treatments for which the level of evidence varies greatly depending on the organization (e.g., depression), and some worrying divergences between organizations regarding the evidence presented for treatments for disorders (e.g., for schizophrenia). The most important conclusion is that which Archibald L. Cochrane already anticipated more than thirty years ago and which is still very relevant for our discipline today: 'It is surely a great criticism of our profession that we have not organized a critical summary, by specialty or subspecialty, adapted periodically, of all relevant randomized controlled trials.' (Cochrane, 1972, p. 11)

Moriana, J. A., Gálvez-Lara, M., & Corpas, J. (January 01, 2017). Psychological treatments for mental disorders in adults: A review of the evidence of leading international organizations. *Clinical Psychology Review*, 54, 29–43.

The implications of this suggest the need for a more level playing field when comparing evidence from existing mental health practice and newer and lesser-known approaches such as mental health promotion.

Appendix 1

Psychological distress in young people

Prevalence of psychological distress in the last 4 weeks (high or very high probability of anxiety or depressive disorder, K10 score ≥ 12). 2011/12 to 2019/20

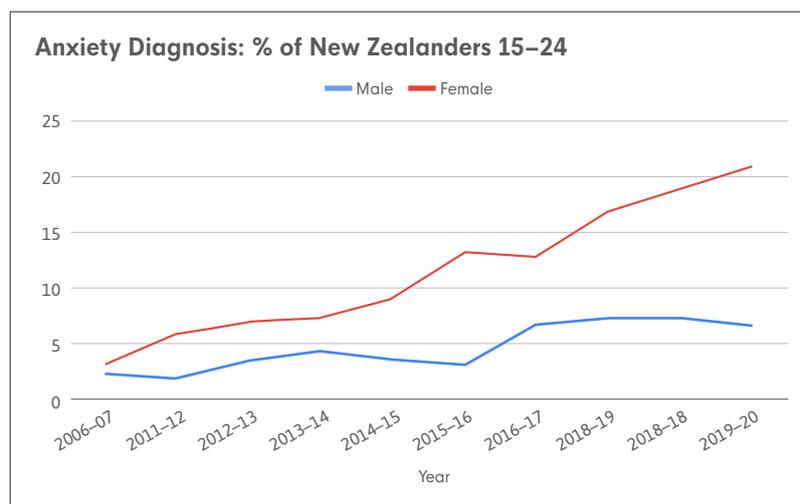
	11/12	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20
15-24	5	6.8	7.2	7.6	8.8	11.8	13.2	14.5	11.1
25-34	5.3	6.6	6.6	7.7	8.4	8.8	10.2	8.7	9.9
35-44	5	6.3	6.5	7.3	8.1	6.3	7.3	6.6	5.6
45-54	4.6	6.6	7.4	5.6	6.8	6.7	8.4	8.6	7.5
55-64	3.8	5.7	4.8	5.3	5.2	6.6	7.4	6.6	6.9
65-74	3.5	4.4	4.4	3.9	3.6	5.4	4.8	4.2	4
75+	3.4	5.2	4.1	3.3	4.1	4.3	5.3	4.9	3.5

Psychological, or mental, distress (aged 15+ years) refers to a person's experience of symptoms such as anxiety, psychological fatigue, or depression in the past four weeks.

Psychological distress means having high or very high levels of psychological distress, with a score of 12 or more on the 10-question Kessler Psychological Distress Scale (K10). Where people have these levels of psychological distress, there is a high or very high probability that they also have an anxiety or depressive disorder. A K10 score of 12 or more is strongly associated with having a mental (depressive or anxiety) disorder in the previous month and in the previous year.

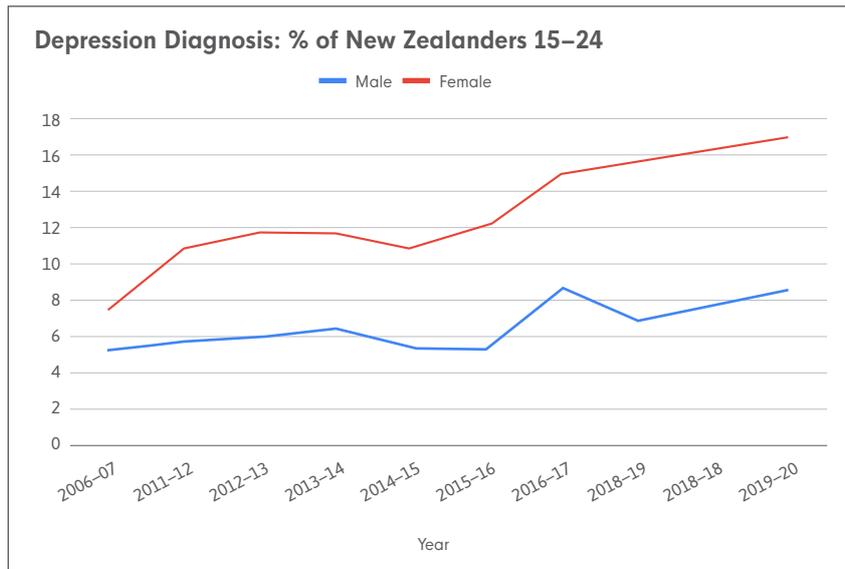
https://minhealthnz.shinyapps.io/nz-health-survey-2019-20-annual-data-explorer/_w_2b03706c/#!/explore-indicators

The following data is copied from currently unpublished international research on youth mental health coordinated by Haidt, J., & Twenge, J. New York University with assistance from Cameron How and reproduced here with kind permission from the author.



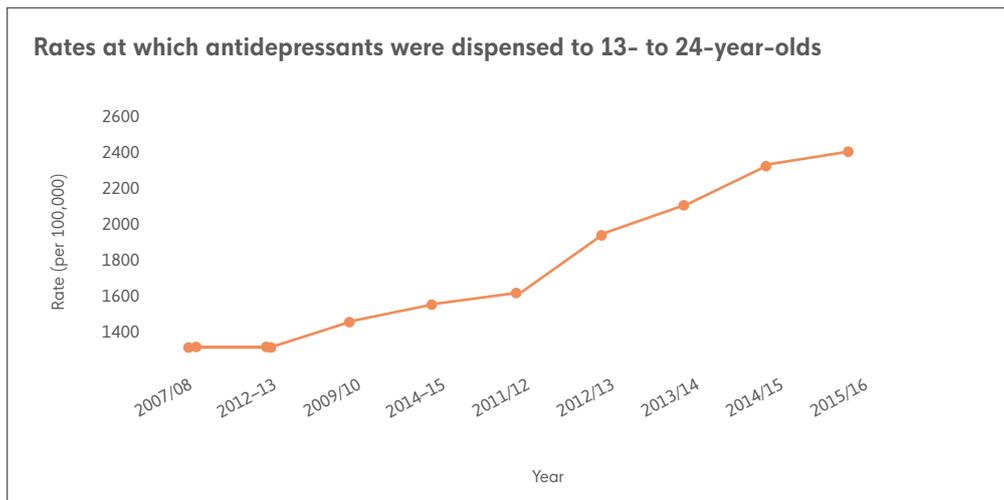
Source NZ Health Survey

The graph shows the percent of people who answered "yes" to the question: "Have you ever been told by a doctor that you have anxiety disorder? This includes panic attacks, phobia, post-traumatic stress disorder, and obsessive compulsive disorder?"



Source NZ Health Survey

The graph shows the percent who answered “yes” to the question: “Have you ever been told by a doctor that you have depression?”



New Zealand Medical Association, 2019. Graph used with kind permission from Stuff Ltd: Brittany Keogh, Use of antidepressants among teenagers rises 83 per cent in nine years. Nov 08, 2019.

Endnotes

- 1 This refers to human centred design principles for social solutions. Useful definitions and explanations can be found here <https://dpmc.govt.nz/our-programmes/policy-project/policy-methods-toolbox/design-thinking> and here <https://www.vic.gov.au/introduction-human-centred-design>
- 2 Found on 30 June 2021 <https://minhealthnz.shinyapps.io/nz-health-survey-2019-20-annual-data-explorer/>
- 3 Found on 8 July 2021 at <https://www.who.int/westernpacific/health-topics/mental-health>
- 4 Found on 7 July 2021 at <https://www.fph.org.uk/policy-campaigns/special-interest-groups/special-interest-groups-list/public-mental-health-special-interest-group/better-mental-health-for-all/why-public-mental-health-matters/mental-well-being-enhances-resilience-and-protects-against-disease/>
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