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No Health without Mental Health: Taking Action to Heal a World in Distress—With People, Places, and Planet 'in Mind'

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Abstract: The unprecedented global rise in mental anguish is closely linked with the erosion of our social fabric, economic and political systems, and to our natural environments. We are facing multiple new large-scale threats to health, safety, and security, with a growing lack of trust in others and in authorities. Pervasive stress, anxiety, depression, and uncertainty are of a nature and scale we have never seen before—manifesting in surging violence, community breakdown, domestic abuse, opioid and other drug overdoses, social isolation, and suicides—with alarming new mental health trends in children and young people. This has been made worse by the COVID-19 pandemic and amplified by an exponential increase in the amount and immediacy of information propagated through electronic media—often negative with manipulative intent aimed at dividing opinions through anger and fear. At the same time, there has been progressive erosion of kindness, civility, compassion, and social supports. Here, in this report from a "campfire" meeting held by the Nova Institute for Health, we discuss the importance of understanding the complexity of these interrelated threats which impact individual and collective mental health. Our dialog highlighted the need for efforts that build both individual and community resilience with more empowering, positive, and inspiring shared narratives that increase purpose and belonging. This includes placing greater value on positive assets that promote awareness and resilience, including creativity, spirituality, mindfulness, and nature connection—recognizing that 'inner' transitions contribute to shifts in mindsets for 'outward' transformation in communities and the world at large. Ultimately, these strategies also encourage and normalize mutualistic values that are essential for collectively improving the health of people, places, and the planet, by overcoming the destructive, exploitative worldviews which created so many of our current challenges in the first place.

Keywords: mental health; anxiety; depression; stress; opioid crisis; kindness; mindfulness; social media; planetary health; spirituality; mutualism; narrative medicine

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1. Introduction: A World in Distress

Our world is in crisis. Numerous large-scale challenges pose threats to the health, safety, and security of individuals and societies, with enormous psychological consequences. An already significant pre-existing decline in mental health was greatly exacerbated by the COVID-19 pandemic. In 2022, the World Health Organization reported that the COVID-19 pandemic was associated with a 28% increase in cases of major depressive disorder and a 27% increase in cases of anxiety disorders worldwide. Low and middle-income countries were significantly affected [1].

Even before the COVID-19 pandemic, there were concerning signs of declining mental health. There has been a staggering increase in "deaths of despair" (from suicide, drug use,

and alcohol use) in the United States over the past few decades [2], with similar trends in the United Kingdom [3]. Psychological stress is also increasing, notably in young people. In 2019, a United States study documented significant increases in serious psychological distress, major depression or suicidal thoughts, and more attempted suicides in adolescents and young adults [4].

Whether or not the reported increasing rates of mental disorders represents a distinct global pandemic may be a matter of debate, but there is no contention that mental disorders are occurring at unacceptably high levels throughout the world [5]. Mental disorders are associated with personal, familial, and socioeconomic risk factors, including poverty, marginalization, and trauma [5,6]. Anxiety and depression are also associated with the destruction of our physical environments [7,8], and declining physical health with the non-communicable disease (NCD) pandemic [9]. Thus, while there may be regional differences in how mental distress is manifest, there are common underlying determinants and global trends that warrant more general concern.

As Richard Reuter, editor of the *International Journal of Drug Policy* wrote recently: "*Ever since 1978, with almost clockwork regularity, the [fatal overdose] number has risen by about 7.4% year after year from 1978 to about 2018...Overdose deaths have witnessed exponential growth since 1979...though the findings are specific to the United States, there is nothing about the potential mechanisms that should apply only in that one country*" [10].

To consider these complexities and strategies to address them, we held an interdisciplinary 'campfire' meeting in April 2022, hosted by the Nova Institute for Health. Our discussions spanned these complexities and explored the common threads and approaches to solutions. Our goal was to underscore the interconnections and interdependencies between the mental health crisis and the many local and global challenges undermining the health of people, places, and planet (Figure 1). This overarching perspective accentuates the need for integrated solutions.



Figure 1. An era of unprecedented stress, anxiety, and uncertainty of a nature and scale we have never really seen before. We are facing multiple new large-scale threats to health, safety, security, to our social, economic, and political systems, and to our natural environments at all scales. This is being amplified by an exponential increase in the amount and immediacy of information propagated through electronic media, often negative with manipulative intent or ulterior motives aimed at dividing opinions through anger and fear. (Art created by author S.L.P.).

2. Complex Causes and Consequences Require Integrated Perspectives

We cannot consider mental health without considering the complex interactions with our physical health, our social connectedness, and the health of 'where' we live and 'how'

we live (Figure 2). Our relationship with nature, the food we eat, our physical and social activity, and the opportunity (or lack thereof) for healthful choices, have major biological influences on both our physical and mental health.



Figure 2. "Breaking points": connections between personal and planetary health. Large-scale damage to natural systems and erosion of social environments is implicated in the unparalleled rise in mental and physical disease—through both biological and psychological pathways. As many as 75% of youth are frightened about the future because of climate and environmental concerns. (Art created by author S.L.P.).

Progressive degradation of physical environments, urban grey space (displacing greenspace), a more sedentary screen-based culture, and shifts towards more ultra-processed food and beverages have contributed to a slow-building global pandemic of non-communicable diseases (NCDs) over the past decades—including the exponential rise in mental health disorders. The collective detrimental effects of these large-scale ecological changes, described as 'dysbiotic drift', penetrate to the molecular level, including the microbial systems at the foundations of immune and metabolic health. Well-documented associations between mental health (mood, anxiety, and mental clarity) and dysbiotic gut microbiota (with associated inflammation and metabolic dysregulation), provide a common biological pathway for numerous environmental effects at the cellular level. For example, documented changes in human microbiomes and gut health with urbanization have been linked with dietary patterns, antibiotics, emulsifiers, air pollution, nature-disconnection, and innumerable environmental toxins as major determinants of the escalation in virtually all NCDs, and are implicated in physiological vulnerability to mental health disorders.

Equally, there has been degradation of our social environments, community cohesion, and emotional supports—all vitally important for mental health and resilience. We are seeing erosion of kindness, civility, and compassion [11,12]. This loss of 'positive' influences has also contributed to community breakdown, isolation, and despair (Figure 1). The rise of social media has promoted a culture of superficial self-obsession, with a documented rise in collective narcissism and declining empathy [13–20]—with damaging consequences at scale [21].

The frantic, accelerating pace of life with information overload, social media fatigue, and multi-screening, are eroding attention spans [22], memory [23], and adding to mental stress and fatigue [24]. We have seen the emergence of "nomophobia"—the fear of being unable to access one's cellphone. Screen media is also associated with physical

consequences such as body image dissatisfaction, and unhealthy eating, sleeping, and physical behaviors [25,26]. In a vicious spiral, social platforms that provide a platform for individual behaviors often contribute more significantly to collective stress. Both the causes and consequences of mental distress are manifest at scale in significant increases in family breakdown and domestic violence [27] which have surged globally with the COVID-19 pandemic [28].

Concerns over world events, climate change, and wide-spread environmental damage also affect mental health—notably in young people (Figure 2). There are increasing levels of eco-anxiety and solastalgia, the sense of loss and powerlessness induced by the destruction of our natural environment [7]. A survey of 10,000 youths (aged 16 to 25 years) from 10 countries indicated that 75% feel the "future is frightening", 56% feel that "humanity is doomed", and 39% are "hesitant to have children" because of global warming [8]. This adds to numerous other concerns about the future, including financial uncertainty in young people [29]. International studies reveal that young people were more vulnerable to stress, depression, and anxiety symptoms associated with the COVID-19 pandemic—an anticipated mental health pandemic that will continue for years to come, as was seen in the aftermath of other global crises, such as the Spanish flu and the Great Depression [29].

Collectively, this complexity underscores that the mental health crisis must be addressed with coordinated approaches that recognize and address the span of influences—from the level of individuals and families to the level of communities and wider societies.

3. A crisis of Relationship: A Common Theme in All Our Global Challenges

As we consider both the causes and the consequences of our many global challenges, we see the human mind and collective mindsets are at the center of this global reality as both 'driver' and 'victim' of our growing problems, further underscoring the bidirectional relationships between personal and planetary health. In search of common threads, the many intersecting crises of the modern era can be viewed as consequences of "broken relationships"—disconnection from each other, from the natural world, and from our own sense of self and purpose [30] (Figure 3).



Figure 3. "Common Threads": broken relationships in all systems. In broad terms, many of our personal, local, and global challenges arise from broken relationships—with each other, with our communities, with nature, and even with our own sense of purpose. Solutions must lie in restoring bonds, including emotional bonds, for benefits across these scales. (Art created by author S.L.P.).

The importance of "bonds between humans, spirit and nature" and the inter-connectedness of all life [31] are foundational within Indigenous land-based worldviews, and at the source of health for all things [32]. These traditional knowledges have long recognized that interference with the balance of natural systems and rhythms directly impacts human wellbeing—a perspective that encompasses the living energy of nature, with spiritual rather than just materialistic value [33].

This 'relational' world view is at odds with the primarily 'transactional' nature of western culture. The dominant western narratives are grounded in exploitation, territorialism, overconsumption, and superficial short-term gratification with little regard for consequences [34,35]. We are immersed in predatory narratives with ulterior motives for power or profit—aimed at polarizing opinions through anger and fear, or simply enticing us to consume more products to feel better about ourselves [34].

'Disconnection from nature' and the impact on mental and physical health has been magnified by increasing screen time and technology culture, especially in younger generations [36]. Psychologists have argued that available evidence indicates that 'nature relatedness' is a basic psychological need [37]. Lower measures of nature relatedness have been linked with lower general health and mental wellbeing [38,39], as well as less concern for the sustainability of the natural environment [40,41]. In contrast, intervention research involving children exposed to biodiversity-rich environments indicates that psychological wellbeing and nature relatedness can improve in tandem [42].

Thus, protecting human health and flourishing for all of life on Earth requires urgent deep structural changes in how we live [43]. However, this cannot be achieved without confronting the underlying value-systems and systems of exploitation and wealth concentration that created and continue to perpetuate our many global challenges of the Anthropocene in the first place, and strengthen efforts to heal territorial, adversarial, and exploitative relationships with nature and each other.

Faced with an existential 'relationship crisis' (with ourselves, others, and the world at large) the solutions must lie in restoring bonds, including emotional bonds, across these scales for more connected consciousness that will benefit personal and planetary health (interdependent systems on all scales). This includes the importance of investing in positive emotional assets and shifting mindsets through 'inner' transitions that can contribute to 'outward' transformation and break the cycle of fear and destruction.

4. Making Connections and Restoring Relationships: Necessitates Intersectoral Collaboration

In the United States, the opioid crisis has been one of the most striking manifestations of declining mental health and community breakdown. There are documented associations between fatal and non-fatal opioid overdose and mental disorders [44]. Although this has been building for decades [2], deaths from drug overdoses have doubled in the United States since 2015 [45]. The steepest rise occurred over 2020, with 100,000 overdose deaths in the first year of COVID-19 pandemic [45], with sustained increases in emergency visits for overdoses in many centers [46]. More than ever, this calls for multidimensional efforts that consider individuals, families, and communities from a life-course and intergenerational perspective in the context of the wider environment, strengthening understanding to enhance connections and positive relationships across these dimensions.

To find opportunities in these challenges, the National Institutes of Health (NIH) has several initiatives that seek to look at health promotion and disease prevention in more integrated ways and engage more diverse stakeholders. For example, the *All of Us* Research Program [47], which was originally launched in 2015 to investigate the links between biology, lifestyle, and the environment in over one million people across the United States, has expanded to consider the wider social determinants of health. There are also more focused efforts at NIH to bring different groups together to integrate coordinated ideas and strategies for specific problems. Two key examples were discussed by Dr Wendy B. Smith (Associate Director, Office of Behavioral and Social Sciences Research (OBSSR), NIH). Each

illustrate the growing awareness of connections between person, place, and planet in the context of the major public health crisis.

The first was in response to the opioid crisis. The NIH has been at the forefront of developing biologics and interventions for treatments of substance abuse. In 2018, the OBSSR played a key role in establishing an NIH-wide pain and opioid initiative [48,49]. They brought together diverse group of stakeholders to give deeper more nuanced perspective to the issues of despair, depression, and isolation—with a focus on the social factors, community factors, and the level of resources [48].This broadened engagement from the standard researcher-driven model to include those who do not typically have a voice at the table: representatives from emergency health services, law and justice, economics, and a range of community representatives. Some of the commentaries from this initiative are published in a special supplement of the *American Journal of Public Health* "US Opioid and Pain Crises: Gaps and Opportunities in Multidisciplinary Research" [50], including legal, government, research, advocate, lived experience, military implications, and racial disparity perspectives.

The second example discussed was the COVID-19 crisis—which has greatly exacerbated the mental health crisis and complicated efforts to address the opioid epidemic. The sheer magnitude of the psychological impacts has served to reduce the stigma of mental health and promote more open conversations. Again, although the COVID-19-crisis has been a global experience, the impact has been very different between individuals and families, depending on work situations, social support systems, level of isolation, access to treatment, and pre-existing risk factors—many of which occur along a socioeconomic gradient. From the NIH perspective, this is another example where the traditional biomedical approach has not been sufficient. There are excellent vaccines and excellent treatments, but the challenges lie in whether they are universally available, and whether people are willing to use them. Political ideologies, polarizing narratives, misinformation, and institutional distrust have penetrated the health agenda in new ways since 2020 [51,52], as another manifestation of the deteriorating social climate. The OBSSR has announced several NIH-wide funding streams for research addressing these wider issues as they pertain to the COVID-19 pandemic and interventions to ameliorate these downstream health impacts.

All these opportunities for diverse engagement have underscored a shared desire to 'find the positives' in these situations. Any crisis or trauma can precipitate change through post traumatic growth. A global crisis (or many) may be an opportunity to catalyze action for much needed global change [53]. We can already see that our current predicament has initiated countless new conversations across traditionally siloed disciples and sectors. Considering the future of our children and the generations to come is a powerful perspective for promoting a unifying vision and the long-range implications if we do not act. One consistent emergent theme from many of these conversations was the need for more empathy, altruism, compassion and caring–for each other, for ourselves, and for our planet.

5. From the "Inside Out": Positive Mindsets for Personal Health Also Have Wider Shared Social Benefits

Personal empowerment can also have wider community benefits. We considered the key personal and grass-roots tools that can facilitate this, including creativity, spirituality, mindfulness, and nature connection, by promoting self-awareness and building character strengths that increase mental and physical well-being [54,55]. In addition to direct personal benefits, the collective benefits can extend to more cohesive communities, wiser societies [56] with less polarization [57], and a stronger sustainability culture [55,58]. Indeed, addressing values and individual and collective mindsets is recognized as an essential dimension of global change in the *2022 Sixth Assessment Report* of the Intergovernmental Panel on Climate Change (IPCC). The report identifies the need to consider "inner transition" and shifts in personal and collective mindsets in many aspects of sustainable transition strategies [59].

The United Nations, along with many governmental and non-governmental organisations, recognize that mindfulness can contribute to understanding and facilitating sustainability, not only at the individual level, but sustainability at all scales [55,60]. As a result, mindfulness is emerging as a core concept in sustainability science, practice, and teaching, for further exploration of how awareness and 'inner' transitions can contribute to shifts in mindsets for 'outward' transformation [61] (Figure 4). This includes at the level of policymakers, with evidence that mindfulness interventions may help to improve perspective-taking, break 'status quo' thinking, and shift ways in which wellness is achieved at larger scales [62,63]. Mindfulness has also been shown to help reduce polarization in the context of political issues [57], underscoring the value in promoting emotionally intelligent leadership.



Figure 4. "From the inside out"—internal transitions promote external transformation: Mindfulness and contemplative practices can build personal resilience and strengthen conscious connections for pro-social and pro-environmental attitudes—with growing evidence linking 'internal' transformation to 'external' actions for sustainability. (Art created by author S.L.P.).

These perspectives encourage thinking about the links between 'person' and 'planet' and the benefits of relatively simple strategies 'across scales'. In an area of growing planetary health challenges, efforts to promote mutualistic attitudes and planetary mindsets are increasingly important [56,64]. This depends on greater awareness and understanding of universal "*interconnectedness as a basic and fundamental reality . . . an awakened sense of interdependence between people and planet . . . that can stimulate psychological integration*", personal wellbeing, "*and a sense of responsibility to the larger world*" [32]. In essence, to promote the upstream determinants of health and flourishing we must equally consider our social and spiritual ecology as we do our natural ecology.

During our meeting, we considered how personal beliefs and world views influence not only personal health, but wider prosocial effects through compassion, awareness, and mutualism. One of the authors shared some strategies we can employ to promote deeper self-awareness, as well as our sense of connection with all things (Box 1). The group discussed the concept that we need to start with ourselves, and that internal transformation is our greatest gift to promoting positive changes in the world. (e.g., we need to "put on our own oxygen mask on first, so we can help others".)

In the context of mounting social media, mindfulness training may help suspend emotionally reactive judgment in the moment and dampen information overload [65,66]. Mindfulness interventions can diminish the credibility of fake news and curb the spread of misinformation on social media [67–69]. People scoring higher in mindfulness are less concerned with how many "likes" they have on their social media posts [70]. Mindfulness

may also be a path to curbing materialism and unsustainable consumption patterns (and by association, NCDs such as depression, linked to materialism) [58,71,72].

Box 1. A personal reflection on mindful strategies *.

This perspective considers our internal transformation so that we can better help others and contribute to the world around us. Many of us spend so much time worried about the future or caught up in the past. When we feel distressed and overwhelmed it is helpful to simplify things and come back to the 'present moment.' I find that bringing my awareness into the present is a simple action of 'being' that helps me let go of those fears or worries even if for just a moment. This helps me see novelty and expand my sense of possibilities. As a clinical psychologist I've learned, in myself, and in working with patients and with students, not to be too prescriptive about all this. When we are distressed, we don't want to be told what to do. Being open, curious, and creative is the key for each person to discover what works for them. Suggestions are best framed as 'invitations' not obligations to be mindful. So, in terms of how to apply mindfulness to these wider challenges we are discussing, I thought of five strategies:

1. The first, is to "*do nothing*" which might sound worthless, but to "just be" and put things down and feel what is it like to be in our body, watch what is going through our mind, be open to sensations, perceptions, feelings, impulses, and patterns; allow ourselves to get carried away and then come back again. It is not just *what* we do, but *how* we do this—with kindness, compassion, and the intention to take good care of ourselves and others. In this sense, mindfulness is not truly passive in that sense—it is to inspire wise action.
2. Consider mindfulness in everyday actions, especially in ways that promote *awareness of our wider connections*—for example "mindful eating". Being mindful of what we eat, the connections it creates to others' efforts, and the planet, can be very helpful in changing what we eat, our relationship with it, our enjoyment, gratitude, how we eat it, and why. How often do we focus and deeply experience our food and really notice it, why we chose it, and everything associated with it, extending to the natural resources that provided it, the efforts of others to grow, cultivate, prepare, bring it to us? How often do we contemplate how it nourishes our body and all the different systems that benefit from the nutrients?
3. Notice the connection between *what we do* in relation to *what we care about*, and if those two things *are aligned*. Do we see our work as a job, a career, or a calling? The role of meaning and purpose in what we do every day is an important influence in our mental health, our resilience, and our risk of burnout.
4. *Find novelty*. Putting ourselves in new places with new experiences can make us become more attuned and more aware of things. It could be a new place in nature, a retreat a meditation, or just somewhere different, where we are less distracted. This can help reboot our level of awareness of our purpose and connections.
5. And finally, taking "*a shift in view*". This could be any process that explores self-reflection, such as journaling, artwork, or meditation. Or some may prefer more structured processed such as online questionnaires that assess core beliefs, schemas, and automatic thoughts. These can be interesting ways to raise your self-awareness and help us consider what we do for ourselves and others.

(These are reflections of author JMG shared during the meeting)*

Whether we are considering the mental health agenda or the sustainability agenda (or the connections between these), this awareness shifts the focus from a 'technical' challenge to a 'relational' challenge which requires restoration of reverence and sacred reciprocity with others and with nature [73,74]. This recognizes that relationships are not so amenable to 'forcing' change, rather "*they thrive on mutual respect, reciprocity, kindness, and yes that four-letter word . . . love*" [73].

6. The Power of Narrative for Personal and Planetary Mindsets

Storytelling is a central universal feature of the development and propagation of culture [75]. Narratives create our reality, our perceptions of the world, and ourselves—including the barrage of manipulative narratives employed in advertising and marketing [34]. In particular, the stories we tell our children are vital in promoting healthy mindsets early in life, when many value systems become established—including empathy, social concern, and care for the environment. As such, childhood is a powerful window in

which to affect a frameshift in attitudes capable of influencing the future 'health' trajectory of individuals, communities, and the wider environment.

Narrative medicine is part of a contemporary movement that underscores the importance of the story in healthcare [76]. While this basic premise is as old as the history of medicine, it is regaining recognition as a powerful tool in communicating and co-creating wellness and health behaviours. In community settings, storytelling promotes cooperative social behavior, equity, and egalitarianism. For these reasons, proactively employing constructive narratives is an important tool in addressing health challenges at both the personal and the planetary scale (Figure 5).



Figure 5. Mindsets of the Anthropocene: *We share the reflections by author J.M.G. in response to this art by author S.L.P.:* "For me these images reflect the 'I, me, mine' focus of the Anthropocene—literally extracting (mining) all we can take from the Earth. This "*my*-ning" culture has a lot to do with the development of distress and disease and disconnection. In contrast, healing is the process of becoming whole and connected, of going beyond 'just me' towards the wholeness of '*we*-ving' (weaving) things together and reconnecting to become stronger and more resilient. I enjoyed creating this play on words when I saw the art". *Jeffrey Greeson, in response to art by Susan Prescott*.

In 2017, one of the authors (M.E-S.) established a narrative medicine course that includes a planetary health perspective. With a central theme of re-valuing 'humanity' in contemporary healthcare practice, it employs narrative competence tools (such as reflection and mindfulness) to re-conceptualizing well-being. This considers how narratives can shape health or illness (belief and behaviours) and responses to these. It extends to how narratives govern wider biopsychosocial determinants of health and resilience, and how we see ourselves in the wider world. These perspectives help students appreciate how narratives influence mindsets and attitudes to ourselves, and to our environment, and the ways in which these are connected.

Our health is partly a function of how we see and react to stressful situations, which has implications at the cellular level. Even in the absence of major life challenges, we are exposed to stress-producing stimuli every day. For example, the barrage of stories and memes from social media. Here, our student physicians co-created a more positive narrative around this constant source of stress (shared in Box 2). To 'change the story' is to change how we see and feel about something, and to change how it affects us. To change it *together* builds community and empowers action. A small example of how we can change our story and expand our vantage point every day.

Being more mindful can make us more aware of the many "inner narratives" that shape our beliefs, behaviours and attitudes to ourselves, others, and the world around us. Becoming more aware is the first step to changing limiting belief systems and unhelpful self-fulfilling narratives. We can be more mindful about the "stories" we propagate around us to others.

Box 2. From Digital Immersion to Mindful Awareness: A video narrative created by Medical Students from Cairo University, Egypt *.

"The Internet has become a cornerstone in our way of life. With over 8 million Facebook page posts, 60,000 Instagram photos, and nearly half a million tweets generated per minute, it is clearly a force to be reckoned with. However, this powerful communication tool is a double-edged sword. Consumers, especially children and teens, can spend hundreds of hours monthly on a wide variety of different apps available to them. Enter TikTok—the latest addition to the bunch and one of the most popular video-sharing platforms of all time. It contains a universe of different topics discussed in the form of short videos, usually less than one minute, by from creators from all age groups and backgrounds. This can be an extremely helpful instrument for learning, raising awareness, spreading cultural knowledge, and building stronger community. But it can also be a tool to spread misinformation, and negative news, and set negative trends that adversely affect many of the people watching them. So, as the next generation, it is our responsibility to use these instruments to build a society that revolves around the wellbeing of person, place, and planet—and to be true leaders of change in an era of mind-boggling evolution.

"More mindful awareness is key to coping with a daily barrage of stressors. By learning how to control our minds, such as with meditation, there are biological and several hormonal changes that help control our biochemical stess responses. Just as our great grandmother's knew, our attitudes, beliefs, and emotions can influence our health and resilience. As physicians, we need to radiate positivity towards better caring for oneself and others. Reflection, mindfulness, and storytelling can promote the prosocial qualities in societies, with hope and vision towards planetary health in the face of pressing global challenges. This is not just a set of ideas, but a set of powerful values that can create small changes towards bigger efforts to in shift illness narratives towards a more hopeful landscape that optimizes health at all scales".

** We sincerely thank the medical students for their narrative (see Acknowledgements).*

In the wider context, there is great interest in the ways in which a change in narratives can be propagated for positive social change [77]. It is well recognized that "tipping points" for collective change can be achieved by relatively small groups seeding new narratives. While there is debate about the extent to which Chenoweth's "3.5% rule" (for successful nonviolent social movements against autocratic regimes) applies in western democratic situations [78,79], there is no doubt that small groups can make a large difference [77]. This is more likely if the new ideas resonate (the "stickiness factor"), and if there is a social or environmental need (the "power of context") [77].

As we consider the many challenges facing societies today, it is clear that criticizing 'old stories' will change nothing if we do not have 'new stories' to replace them. Improving health (of people, places, and planet) depends on narratives that give greater emphasis to values, purpose, education (especially in young people), positive emotional assets, self-awareness, and mutualism—conditions likely to promote more "positive contagions".

7. Conclusions: Promoting Connected Consciousness

A core goal of our meeting was to articulate the layered dimensions of our interconnected challenges, consider the elements needed for change, and cultivate the inspiration to act. This also involved "looking over the parapet" to extend the horizon of hope and possibilities (Figure 6). Our discussions underscored that, in an era of broken relationships on every level, solutions lie in pathways to reconnection. Everything is pointing to the need for more connected consciousness—aligning personal and planetary mindsets, for stronger relationships with ourselves, others, and the natural world—because in doing so we also restore our hope and purpose.

In considering actions for change, some of the 'core ingredients' identified from our meeting are articulated in Box 3. Because our complex threats are interrelated, we also depend on integrated solutions that can only be built through connectivity and meaningful relationships. Such efforts build both individual and community resilience with more empowering shared narratives that also increase purpose and belonging.

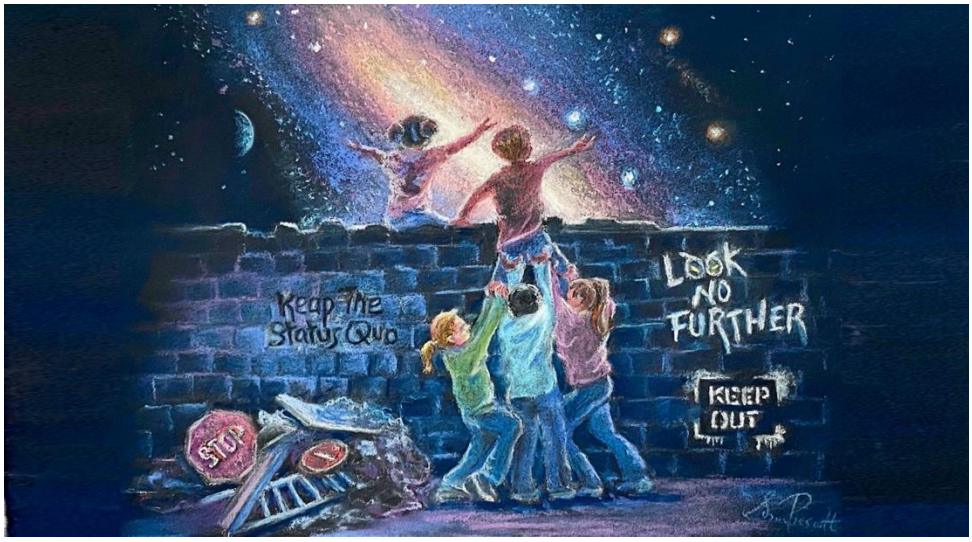


Figure 6. "Looking over the parapet": Aspirational goals for new horizons of possibility. (Art created by author S.L.P.).

Box 3. Actions for Change: Considering the Core Ingredients.

(Including aspirational changes that will only be achieved if we first include them in our goals)

1. Widen recognition of the interconnections between our challenges and the limitations of isolated efforts.
2. More inclusive, dynamic, creative, empowering approaches that include diverse engagement across sectors and communities.
3. Enable, connect, and align "grass roots" efforts with more 'top down' approaches to problem—recognizing and elevating the value of local coal-face knowledge.
4. Reduce the culture of polarization, marginalization, blame, and retribution which can permeate change agendas—with more efforts to find and amplify common ground and shared purpose.
5. Promote a culture of kindness, respect and listening, including learnings from other cultures—in ways that empowers rather than dictates, and challenges authoritarian attitudes and social dominance behaviors.
6. Place greater value on self-awareness and self-development for personal empowerment and wellness—recognizing that this also promotes altruism and community resilience (includes spirituality, creativity, nature relatedness etc.).
7. Promote community, belonging and connection with others for a greater sense of social responsibility (includes effort to identify suffering for earlier intervention).
8. Promote connection to nature to improve physical, mental and social health—and sense of environmental responsibility (includes effort to create healthier, safer community spaces).
9. Create and promote positive narratives for hope and change, to shift the focus on '*what is wrong with the world*' to '*what we can do about it together*'—including normalizing reciprocity and more mutualistic value systems.
10. Create more tangible pathways for people to engage in meaningful change—as this generates hope, empowerment, and amplifies engagement.
11. Businesses, institutions, and organizations act with greater, genuine, social and environmental responsibility towards. It becomes 'unacceptable' to act against the interest of people, places, or planet.
12. Ensure that long-range thinking is at the core of all decisions and considers far ranging consequences and long-term effects of actions—including implication for the generations to come.
13. Policies and practices that facilitate all these goals.
14. Build and encourage connected consciousness—the awareness that all things are connected in ways that recognize the sacred importance of each individual element and its vital contribution and connection to the whole (that large-scale illness or damage of any elements has implications for whole systems).

So, in addition to addressing the many negative aspects of the physical, social, and economic environment that undermine wellbeing, we must place greater value on the positive assets that promote conscious connections and relationships, including creativity, spirituality, mindfulness, nature connection, and efforts to promote social cohesion and resilience—recognizing that both personal and collective actions are needed in tandem—and that each of us can make an important difference.

We quite literally need to change the stories that have shaped our reality and replace self-destructive narratives with more constructive ones. A more connected consciousness gives power to the more mutualistic attitudes and value systems, as we seek to overcome the exploitative worldviews that created our challenges in the first place. To paraphrase the words attributed to John Lennon and Yoko Ono:

"A dream you dream alone is only a dream.

A dream we dream together is reality".

Above all, we must strive to be "wiser ancestors" and promote hope for the generations to come. For the sake of our children, we need to expand the focus from merely technical solutions to give greater emphasis to our deeper human potential—to our inner dimensions as the real heart of change. This deeper consciousness and relationship with the awe and wonder of life itself will improve mental and physical wellbeing, and our sense of connection with all things.

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