Challenge Paper: Re-thinking Health & Well-being

"We can be blind to the obvious, and we are also blind to our blindness"

Daniel Kahneman in Thinking, Fast and Slow (1)

1. Purpose

This paper is an invitation to overcome a force with such an enormous strength and universality that it has been considered close to a natural law. Such force is known as confirmation bias (2), or our strong tendency as humans to look for the presence of what we expect, to retain a hypothesis we like, or to resist to abandon a cherished belief, usually ignoring or rejecting contradictory evidence (3). In this particular case, the issue is whether we would be able to disentangle health from disease and well-being from unmet needs. Then and only then, it will be possible for us to imagine and notice a myriad possibilities that the relentless medicalization of life has kept hidden from us, for more than a century.

2. The key challenge to be addressed

This paper departs from the usual approaches to rethinking health, most of which are based on opportunities to secure the sustainability of the healthcare system (4), to contain the tsunami of chronic diseases (5), to promote behaviour change (6), to deal with inequity, human right violations and other forms of injustice (7,8) or to usher in "precision medicine" (9,10). Similarly, the paper avoids more conventional paths to rethink well-being, which tend to focus on new opportunities to enhance human freedom and capabilities (11), to eliminate suffering (12), to "reassemble" power structures around labour (13) or the enhance human happiness (14).

Instead of jumping straight into proposing opportunities to improve human health and well-being in the near future, this paper will attempt to focus our attention first on what could arguably be our most fundamental challenges today: to value the need to devote time to reflecting upon the meaning of "health" and "well-being", to be able to handle the discomfort that we will experience as we discover previously invisible conceptual gaps, and to be capable of overcoming our resistance to free health and well-being from the influence that disease and unmet needs have exerted over them, fueled by the insidious way in which market forces and politics have colluded to cloud our thinking.

The starting point for this journey will be the definition of “health” used by the representatives of the member states of the United Nations who participated in the constitution of the World Health Organization in 1948. Such definition declared health to be “a state of complete physical, mental and social well-being, and not just the absence of disease or infirmity” (15). This was perhaps the first time in history in which health, disease and well-being were linked in a sentence, as part of a document designed to have global impact. Deceptively benign and seemingly aspirational, this definition, which has remained unchanged ever since, has a major problem: It condemns us all to be **not healthy**, as practically nobody could claim to have **complete** physical, mental **and** social well-being! Just by having dental cavities, wearing glasses, feeling tired or worried or hungry, worrying about a debt or an exam, a person could not be regarded as being healthy (16).

The WHO definition had another adverse effect: it gave well-being a subordinate role to health, a fact that has remained undisputed for more than 70 years, creating confusion as to what the word itself means, and how it really relates to health (17,18).

3. The sponsor of this paper

This paper has been written by Alex Jadad, who began thinking about the meaning of health and well-being in 2008, soon after becoming a patient undergoing tests to rule out a diagnosis of colon cancer. During this process, he wondered if it would be possible to have cancer and be healthy at the same time. This scenario, which seems ridiculous at first glance, forced him to realize that he did not know what “health” meant, even though he was a physician with more than 20 years of medical education, and had spent most of his adult life as a “health professional”, researcher and professor in faculties that claimed to focus on health. Motivated by this realization, and aware of the inadequacy of the WHO approach, he decided to ask the question, “What is health?” in as many scenarios as possible, including a celebration of the 60th anniversary of the WHO, which was being celebrated that same year. Lacking a satisfactory answer (and with the diagnosis of cancer ruled out), he proposed to initiate a global conversation about the meaning of health to the British Medical Journal, which he coordinated for more than three years (19,20). Following a meeting in The Hague, motivated by the energy generated by the global conversation, leaders from around the world proposed a new conceptualization, which considers health to be “*the ability to adapt and self-manage in the face of social, physical, and emotional challenge”* (21).

The rest of this paper owes a lot to the co-authors of this work, to the people who participated in the global conversation, and to many collaborators who have used the new conceptualization since 2011 to study what causes health, to guide the completion

of a pandemic of health (22), and to clarify the meaning of well-being and its implications for achieving a full life.

4. The initial assumptions

- It is impossible to define *health* or *well-being*. A definition would require “an exact statement or description of the nature, scope, or meaning of something” (23). The reason that makes defining complex terms with precise words impossible is that “we know more than we can tell”. This is what has been called “The Tacit Dimension” (24) or *tacit knowledge (25)*.
- It is possible to capture the meaning of terms such as “health” and “well-being” through a process known as *conceptualization*, which enables the translation of abstract ideas (or constructs) using words or images, gestures, or some other imperfect means of communication, recognizing their limitations, and not expecting to produce an exact description (26,27). Therefore, conceptualizations should be open to continuous discussion and improvement.
- By viewing it not as a state but as an **ability**, the new conceptualization makes health:
    - Something that could be learned and developed, and opens the possibility for training at all levels.
    - Applicable to individuals, to communities, organizations and even to the human species as a whole.
    - Compatible with the presence of diseases, even when they are multiple and complex, or terminal.
- The approach used to conceptualize health could be used to re-think the meaning of well-being.
- There is a strong possibility that health could be considered an element of human well-being.
- Disentangling health from disease and well-being from unmet material human needs could open many new opportunities to make better use of existing healthcare and social services.
- Efforts seeking to achieve optimal levels of health and well-being will likely trigger a push back from those who profit from the medicalization of life or the provision of dysfunctional social services.

5. The big systemic issues

a) The medicalization of life is pervasive

Medicalization is the term given to the extension of the role of medicine to include what previously was considered as part of the normal events and experiences of our lives, by converting them into problems that require medical supervision and intervention (28). This process took off when antibiotics were shown capable of controlling infections, which had been the main cause of human mortality since time immemorial. If we humans could control our main killer, we concluded, it should then be easy to conquer all of the remaining threats to our lives. What we have witnessed since the 1930s is the launch of a series of medical wars, fueled by relentless efforts to find and use “magic bullets” (29), and to develop “smart bombs”, and “missiles” targeting cancer first, then diabetes, heart disease, obesity, arthritis and dementia (30) and more recently, death itself (31).

As the **merchants of immortality** peddle their wares, creating and feeding from multiple fads (with the “omics” being the most recent), medicine is gaining even more power over all phases of our lives, from before birth until the very end (32). As Ivan Illich put it so presciently and poignantly, “Health, or the autonomous power to cope, has been expropriated down to the last breath.” (33). Nowadays, almost every physical, mental or social challenge faced by humans could easily be considered as a condition to be corrected through medical means (34).

Now, a new force is emerging. In addition to the pursuit of immortality, medicalization seems to be emboldened increasingly by what has been called *amortality*, the belief in our ability to forestall ageing, and to avoid or ignore decrepitude and death (35). This new trend could provide a unique opportunity to create a new set of incentives for politicians, professionals, academics, philanthropists, communicators and clinicians to accept the attitudes, knowledge, skills and behaviors needed to drive society towards health (36), without colliding with the powerful medical-industrial complex (2).

b) Truly health-specific indicators are lacking

The vast majority of established so-called health indicators in use today do not really focus on health per se. Of the 27 items that are included in the “health status” category of the WHO global “core” set, 25 relate to mortality or morbidity, and two to fertility. The remaining 73 indicators address risk factors for diseases (n = 21), healthcare service coverage (n = 27) or different aspects of the healthcare system (n = 27) such as quality of care, access to services, characteristics of the workforce, information management and financing (37).

A much more sensible approach, as it is the case with constructs related to humans experience, is to ask people what they think about their own health, as the starting point.

Although this has been done for decades as part of quality of life research or large population-based studies, self-reported (also known as self-rated or self-assessed) health judgements have rarely been used to guide policy, financial or clinical decisions, perhaps because they are perceived as “too soft”.

Nevertheless, such assessments are easy and cheap to obtain, have shown remarkable validity and predictive power, and align well with the new conceptualization of health (38).

The assessments are typically obtained in response to a single question that is most often asked using one of two highly correlated versions (39). The American version typically reads thus: *“In general, how would you rate your health today: excellent, very good, good, fair or poor?”* The version favoured by the WHO is almost always presented thus *“In general, how would you rate your health today: very good, good, moderate, bad or very bad?”*

Once the assessments are obtained, they can be easily categorized into two groups. Using the American version of the question, individuals who choose to respond “good”, “very good” or “excellent” could be considered as having *positive health*, while those who respond “poor” or “fair” are deemed to have *negative health*. A similar picture emerges when “good” is used as the cut off point with the WHO version.

Despite the discomfort that such openly subjective assessments produce among those who prefer “harder” indicators such as laboratory tests, death rates or life expectancy, self-assessments of health are highly predictive of short- and long-term mortality, even after adjustment for functional status, known disease risk factors and socioeconomic status, depression and comorbidity (40–46). Self-reports also been shown to predict decline in physical functioning (47,48), and significant reductions in emergency room use (49) and aggregate health expenditures (50). Negative health, on the other hand, has been associated with a doubling in mortality rates (45,51), as well as increased prevalence of a large list of chronic conditions including cardiovascular and cerebrovascular diseases, visual impairment and mental disorders (41,52).

c) “Health system” is a misnomer

Just as the meaning of health and its assessment have been dominated by a disease-centric approach, most health services are provided within the context of “disease care systems”. Calling them “systems” is a misnomer at best, and disingenuous at worst, as they work more like a disjointed franchise of inefficient repair shops, offering services to the public along dysfunctional production lines operated by people who are increasingly

at risk of behaving like robots. As a result, most of the resources available are consumed by activities designed to diagnose and fix problems that are largely unfixable (e.g., incurable chronic complex diseases), or are directed to providing medical responses to social problems, instead of being used to deal with curable conditions for which medicine is very good.

d) Health itself is pandemic

At first, finding the words *pandemic* and *health* in the same sentence might feel strange. After all, the word *pandemic* is almost always associated with diseases.

Upon closer examination, the possibility of the existence of a **pandemic of health** makes sense. Etymologically, for instance, the word has nothing to do with diseases. It comes from the Greek terms *pan* and *demos*, which mean *all*, and *people*, respectively (53).

From a policy and academic perspective, the case is also easy to make. Although the word *pandemic* was used for the first time in 1666, the need to interest in achieve consensus about its meaning was spurred by the confusion that became evident during the influenza outbreak of 2009 (54). Nowadays, there is really a single criterion to declare something to be pandemic, derived from a careful analysis of historical instances in which the word has been associated with outbreaks of infectious diseases. This criterion is wide geographic extension (55), usually involving multiple countries or continents, and usually affecting a substantial proportion of the population (56). The World Health Organization (WHO) would declare a pandemic when there are communities affected in at least two countries in one of its regions, and affects at least another continent (57).

If widespread geographic presence is the mainstay of pandemics, then health qualifies as such, and could even be considered as the one of the most extensive of all cases ever reported. A good foundation for this assertion is the World Health Survey, a cross-sectional study coordinated by the WHO from 2002 to 2004, which involved 69 representative nations in the world, and included 271,371 people over the age of 18 years (58). One of the questions in the survey asked people to judge their own health. When the answers are analyzed in aggregate, 62% of people reported their own health to be good or very good (59).

The prevalence of health judged by people to be good or better - which could be regarded in a more general sense as “positive health” (60–62) - is much higher than any of those recorded for the worst pandemics of infectious diseases reported to date. The Black Death was responsible for around 50 million deaths (63), representing 11% of the global population of 450 million people (64). The Spanish Flu pandemic was responsible for the deaths of 3% of the world’s population during the late 1910s (65). Even the death toll of the infectious diseases that killed more than 90% of the indigenous peoples of the

Americas after the arrival of the European colonizers is estimated at up to 45 million, which is equivalent to 9% of the total world's population in the 15th century. Even if 100% of the native population had been infected, the latter proportion would have increased by just 1% (64).

Perhaps the only condition that has a higher prevalence than positive health is dental caries, which is present in 60% to 90% of school children and 100% of adults, worldwide (66). All other chronic ailments which have been suggested as pandemic (67) pale in comparison with them. Overweight, for instance, is present in 1.9 billion people, representing only 25% of the world's population (68).

In countries like Canada, the figures of positive health are staggeringly high. In 2015, for instance, 89% of the population surveyed reported their own health to be good, very good or excellent (69). Even when faced with multiple chronic conditions, most Canadians perceive themselves to be healthy, as indicated by survey of over 3,000 people aged 65 years or older showed that 77% of those with two chronic diseases, and 51% of those with three or more diseases regarded their health to be good, very good, or excellent (70). An Australian study further illustrated not only that most people (62%) living with advanced incurable cancer consider their health to be good or better, but also that self-assessments are powerful predictors of their survival (47,71,72).

These data confirm that every person has the opportunity to experience positive health, making a complete pandemic of health - one affecting every human being - feasible and potentially viable.

e) The economic view of well-being is losing its dominance

The publication of Mandeville's *The Fable of the Bees* in 1714 (73), initiated a long period during which it was believed that the power of the market could convert the greed of those pursuing their own financial interests into well-being for everyone (74). Since then, with few exceptions, economic indicators such as the Gross Domestic Product (GDP) have been deemed to reflect accurately the level of human well-being, both individually and collectively (75). Despite its obvious flaws, this "economistic" approach maintained its dominance until the late 1920s, when the Great Depression threatened the survival of capitalism and the power of the small group of individuals who held most of the material wealth in the United States at the time. To avoid what appeared to be an imminent revolution, the richest Americans contributed large sums of money to the government to create a system of benefits to enable the less fortunate to receive what they could no longer obtain through the market, including education, health services, relief during periods of unemployment or pensions. This model to protect capitalism was applied and consolidated in Europe after the Second World War through the Marshall

Plan. As a result, it became accepted that human well-being was a reflection of the effectiveness of governments to provide social services to the population.

After the oil crisis of 1973, the globalization of the economy in the 1980s, and the financial collapse of 2008, an immense pyramid of debt that had been built over decades was progressively transferred from the private sphere to the public sector, making the general population responsible for covering the financial holes that the financial system had created. This reduced the capacity of governments to provide social services and opened the door to the private sector to take them over, making the population increasingly vulnerable to self-interested actors for whom continuous economic growth was the main driver.

As governments were losing their capacity to pretend that their main role was to protect their citizens, they started to give more prominence to subjective approaches to the assessment of well-being, away from the economic indicators they no longer could control. In 2008, France took the first step to reduce the importance of GDP and search for alternatives that could help the government maintain the illusion that it had the capacity to promote social progress, despite the financial crisis. Something similar happened in the United Kingdom in 2010, where a national project was launched to replace the GDP with general well-being indicators (76). As the financial crisis was gaining momentum, the Organization for Economic Cooperation and Development (OECD) initiated The Global Project on Measuring the Progress of Societies, which became probably the largest effort ever undertaken to take down the GDP from its pedestal (77).

These efforts to divert attention from the material to the psychological revealed something that had been neglected from the outset: the lack of a clear conceptualization of well-being. This lack of clarity has led to a confusing picture in which well-being is often found entangled with other complex and increasingly used terms, such as happiness or quality of life (78–80).

6. Expected outcomes, possible actions and next steps

This paper seeks to feed a sophisticated conversation about how best to achieve the following outcomes:

a) Adoption of the new concept of health

This will require careful deliberations about the economic and political measures that would be needed to reverse the heavy level of medicalization (or “pathologization”) of our modern society. Such measures would need to include, among others, the creation of new incentives for practically every group of stakeholders except for patients and

staunch proponents of health promotion, to propel society towards the creation of health. This will not be easy, given the extent to which most activities and careers are currently rewarded, while feeding a veritable, almighty medical-industrial complex (81).

b) Repositioning of self-reported health as the main indicator

Making this happen will also be difficult, despite the ease, low cost, validity and predictive power of self-assessments of health. The conversation would need to focus on ways to overcome the ingrained “pathophillic” nature of practically all of the indicators in use, and creative efforts to align positive health with the interests of the powerful groups that are currently profiting from disease.

c) Creation of new models to enable health-creating service provision

Genuine, health-focused models for service provision should incorporate a comprehensive menu of services designed to allow any person in the community to feel healthy. Such services would be supported by health-oriented insurance, management, financing, and evaluation modules, and would aim at preventing the preventable, curing the curable, relieving the relievable, controlling the controllable, and transcending the inevitable, while always accompanying people whenever and wherever they make efforts to achieve or maintain positive levels of health.

d) Identification and exchange of knowledge about effective innovations

Most successful efforts showing that it is possible to create and maintain positive levels of health remain like islands in a global archipelago of innovation, often unknown beyond the limited geographic area in which they have been developed and implemented.

Digital technologies—particularly in the form of an ecosystem of global open source knowledge management resources—could enable the innovators behind such breakthroughs to make their work visible to interested people from around the world, and to engage in collaborative efforts, efficiently, across geographic and institutional boundaries. Such ecosystems should include, as a minimum, a powerful database to store the information about the innovations; tools for innovators to update their information directly and autonomously, and for system administrators to vet, approve, or blacklist services; multiple search capabilities; easy-to-share content, free of cost; and a strong set of easy-to-deploy measures to punish or deter those who misuse sensitive personal data.

e) Scaling of sustainable successful initiatives

Today, adopting or adapting proven innovations *in settings other than those in which they were developed originally* is extraordinarily hard and time-consuming. Even if and when it occurs, scaling up any successful effort to a global level, and sustaining it over time, will be practically impossible. **One of the main impediments is the lack of organizations with the mandate to promote, support, or fund the global implementation of disruptive health-creating initiatives.** There is even less support, of any kind, to sustain such efforts over long periods of time. As a result, most effective innovations have very limited impact, both in time and space.

As this picture is unlikely to change in the foreseeable future, perhaps the only available way to multiply and sustain effective health-creating innovations is in the hands of existing large global digital data organizations, particularly those with an apparently altruistic nature, such as Wikipedia. More realistically, scaling and sustaining successful innovations might only happen through the creation of entirely new social business models that do not require the end users to pay for their services, which are immune to the chronic financial woes plaguing healthcare systems the world over, and which could be designed, deliberately, to activate and unleash millions of human and technological vectors to complete the pandemic of health.

f) Nurturing a movement to usher in a culture of health promotion

In 1986, the Ottawa Health Charter called for international efforts to achieve “health for all” by the year 2000, through health promotion activities that were meant to enable people to gain control over their lives and to improve their health (82). Sadly, the Charter had little impact, ending up overshadowed by the relentless power of medicine.

The time has come to design a completely fresh strategy to turn into reality the large-scale transformative movement that was meant to follow the launch of the Charter. Perhaps the ubiquitous presence of digital technologies, and the deep penetration of social media platforms provide new opportunities to mobilize and motivate people to pay more attention to what causes health, as opposed to what causes disease (83).

g) Cultivation of “Precision Health”

Precision Medicine promises to revolutionize healthcare through the recognition that each patient is unique from a biological perspective. This notion, which goes back

thousands of years, now relies on breakthroughs from research on genomics, proteomics, metabolomics, and microbiomics to identify and correct the unique abnormalities affecting each individual patient (84). Analogously, there is an opportunity for the emergence of what could be called Precision Health. Such an approach would involve an explicit acknowledgement of the uniqueness of each person in terms of the capacity to adapt and self-manage when facing physical, mental, or social challenges, and effective means to mobilize the best available resources in the world to boost it.

For Precision Health to work, as it is the case with Precision Medicine, digital technologies will be essential to fuel the massive individualization required to make it part of day-to-day reality. Social networking tools, such as those offered by applications designed to help people access services to meet their needs (e.g. book a table at a restaurant, make a flight reservation, and find a date), could be easily adapted to allow people to make explicit their unique characteristics in terms of self-reported health, as well as their values, preferences, circumstances, incentives, and goals. Once individual profiles are created, they could be matched with the most compatible assets in their communities with which they could maintain or achieve good levels of health.

h) Humanistic conceptualization of well-being

Just as it happened with the meaning of the word "health", the limitations that are created by the perception of well-being as a state or as something that can be evaluated from the outside, or that depends on the acquisition or provision of material goods, could probably be overcome by regarding well-being as an ability.

The most prominent connection between well-being and ability was made by Amartya Sen in 1979, when he introduced the concept of human capabilities. Sen suggested a little later that we should consider well-being as "the ability to do valuable acts" (85). The limitation of this approach is that it requires someone to judge what is "valuable", again running the risk of falling back into an economistic paradigm. An approach that might be even more appropriate was proposed by Sumner, who suggested that we consider well-being as: "The ability to judge that our life is going, or is, well" (86,87).

This conceptualization, which mirrors that of health, could be considered as our best option to recover the protagonic role we must have in our own lives. It could also lead to an analogous approach to self-rating well-being, through a question such as: “In general, how would you rate your well-being, understood as the ability to judge that your life is going well: poor, fair, good, very good or excellent?”. In turn, the answers to this question would lead to judging the levels of well-being as positive or negative, enabling studies using them as dependent variables to determine what are its true determinants.

i) Clarification of the relationship between health and well-being

Upon examination of the OECD effort to propose indicators of well-being, the largest effort to date, it is clear that the first indicator that is presented, within the component of quality of life is, precisely, the health status of the population. The only indicator apart from life expectancy that is included is self-reported health.

In sum, the two most ambitious efforts to clarify the meaning of health and well-being consider the alternative term to be part of the one being addressed. This invites deliberation as to whether well-being should be a component of health or vice versa, health a component of well-being.

It might help to examine the conceptualizations of health and well-being as abilities side by side, as a means to find insights that might help clarify the situation.

Thus, health could be considered reactive, as it requires an adaptive response to challenges. The concept of well-being, on the other hand, seems to be more proactive, since it calls for an assessment of our life to determine how well it is going.

Therefore, if a choice were necessary, it would appear more appropriate to consider health to be a component of well-being, as judging how well our life is going would involve an assessment of our capacity to adapt and manage challenges, in addition to other aspects that go beyond the reactive, such as having social connections or a satisfactory level of education or income, among many others.

Regardless of whether well-being is the overarching concept, its conceptualization could be used as the substrate for efforts focused on re-thinking it along the lines of what was proposed for health. Therefore, it would be possible to ponder and develop strategies to encourage the widespread adoption of such conceptualization, the use of self-reported well-being as the top indicator, the emergence of well-being-creating services and systems, the identification and scaling up of effective innovations, the creation of movements to promote well-being, and the cultivation of “precision well-being”.

These ideas, which are intended to stimulate conversations and our imagination – both virtually and in person, might also act as signposts to guide us as we attempt to muster the unprecedented levels of leadership, clear vision, conviction, and willingness to engage in painstaking work that are needed to see the emergence of systems that are truly devoted to enabling humans to achieve optimal levels of health and well-being, as part of a flourishing planet.

Alex Jadad
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