***Discussion***

In the not-so-recent article (July 2011) by Huber et al., entitled "Health: How Should We Define It?" the authors present some interesting alternatives to the WHO definition of health. They argue that health is more an ability to "adapt and self-manage" than a state of "complete physical, mental and social well-being." Such an alternative conceptual framework is useful because it makes the health care system more realistic in terms of spending money on states of ill-health, among other reasons.

Wisely, Huber et al. do not try to overturn the old WHO definition, which was established in 1946. That definition is figuratively set in concrete. This attempt to redefine health is useful because it reminds us that health is something which is felt internally, as well as being something that others assess externally in clinical settings. We have "social assessment" of our health by health professionals, family members and friends, and then we have the "self assessment" of health, which is defined by how we "feel" and look to ourselves. There will always be some agreement between these two ways of defining our health, but often there will be important differences which affect whether or not we seek professional help. As we age, we may be plagued with a whole variety of minor complaints, but if we feel good, and are able to function without much pain, there is no reason to see a doctor. "Social assessment" may creep into our perception of health, but ultimately the "self assessment" will trump anything but overwhelming pressure from others to seek help. Ultimately, health should be defined, even by the WHO, to include these two elements

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Huber and colleagues bring needed attention to the WHO definition of health. Their suggestions are to move the definition toward adaptation and self-management in the face of challenges. (1) However, since challenges to be faced in life can never be known until they occur, their suggestion would encourage reactive instead of proactive actions by individuals and professionals. This author suggests it is necessary to define health, as WHO has done, in a way that inspires the desire to improve physical, mental and social well-being for its own sake. By doing this, abilities to adapt and self-manage are improved as a better life is created. (2-5)

Improved health provides an opportunity to manifest a better life. Health is a dynamic, not static state that one must work to continuously generate. Health is not something that can be achieved by reacting to current circumstances. The WHO definition provides an ideal state to work toward by defining health as a state of complete physical, mental and social well-being and not merely the absence of disease and infirmity (6).

Humans have a unique, innate ability and desire to adapt and continually improve their state of well-being. Health is not as much an end point as it is an enabling capacity to facilitate progress toward a desired life. Huber and colleagues’ commentary suggests that the WHO definition would consider most individuals to be unhealthy or definitively ill most of the time and that this would then lead to the undesired outcome of increased medicalization. (1) This interpretation is correct if health is understood to be the absence of disease and infirmity and not as the presence of well-being.

WHO explains that health is the PRESENCE of physical, mental and social well-being and not merely the ABSENCE of disease and infirmity. (6) Only conscious action can create these desired states of well-being. Seeing health as the absence of disease and infirmity is narrow and incomplete. Instead of defining health as a higher state to be created and continually achieved, Huber and colleagues suggested redefinition would seem to encourage a return to a predetermined baseline instead of a move toward a higher state of well-being. Putting a focus on the precursors to achievement, accomplishment and thriving, something required with the current definition, inspires action to enhance physical, mental, and social well-being.

Though we are pulled to the status quo or maintenance by the endowment effect, (7) it does not inspire. Furthermore, passive reactionary stances and maintenance of the status quo through "…the ability to adapt and to self-manage" would be encouraged if this redefinition were accepted. Accomplishment and achievement of one’s desires, on the other hand, inspires action. The current WHO definition inspires action to create a dynamic and improving state of health that can be measured by determining engagement in health promoting actions. Results document that the more people engage in health promoting actions, the greater their well-being, satisfaction, and performance and the lower their incidence of symptoms and problems associated with disease and infirmity because of a better ability to adapt and self-manage in the face of challenges. (8,9)

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The definition of health as the "ability to adapt and to self manage" is an important step toward a full comprehension of health and disease. In fact, the question about the nature of health is overwhelming. To answer it, we have to ask: When do we not feel healthy? We can easily answer: When we cannot do something that we used to or something that people commonly do. For instance, when we can no longer run as swiftly as we used to, or when a disease inhibits eating food that people commonly eat. To drink, to walk, to eat ice cream, to read a good book; to restore breathing if our nose is obstructed, to restore sight if we are blind or to kill pain if we have a headache - to be healthy is to realize this. The awareness that our desires are being realized is what we call well-being: in other words, the awareness of health. It is important to affirm that, even in the case of chronic diseases, health is possible, first because many disabled people show how to be healthy despite their disability (e.g. Paralympic champions or world famous blind singers such as Andrea Bocelli or Ray Charles); second, because precluding disabled people from health to is relegating them to a second-class personhood.

The only flaw I see in this paper's definition of health is that it highlights only the active aspect of an healthy person, while even when dependent on others a human being maintains his/her dignity and therefore his/her possibility of health: the opposite of health is not the lack of autonomy, but the lack of hope.

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The proposed new definition for health risks further blurring of the  
health - disease transitions and possibly would lead to an oxymoronic  
state of 'healthy disease'. Would a single mum in a poor country working  
during her bout of flu be termed healthy since she is able to adapt and  
self manage whereas a young adult in a rich country who is 'off sick from  
work' with flu might be termed as unhealthy.(1).

The general public would define health as absence of disease. The  
problem lies with definition of diseases not with definition of health.  
Ever expanding pre-disease categories and risk factors are increasingly  
viewed as physical disease. (2). 'Normal life events' are increasingly  
categorised as mental health problems. (3).

The availability of rapid genome wide sequencing might detect low  
penetrant disease risk genes in practically most of us and this  
potentially can put most of us in some pre-disease categories.(4).

Hence there is an urgent need to define disease before we define  
health. Otherwise concept of 'health' risks becoming a philosophical  
concept discussed along with 'meaning of life'!

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As a participant at the international conference referred to in the  
above paper (my contributions to these debates is acknowledged by the  
authors) I would like to make three comments on the ideas they present.

1. The authors fail to appreciate what for many is the key strength of the  
WHO definition which paradoxically is a weakness of the approach they are  
proposing. The WHO definition is 'aspirational' aiming to guide national  
and global health governance not to provide a conceptual framework for  
operationalising 'health' in a narrow technical sense.

2. The WHO definition was the product of an inclusive dialogue involving  
'lay' and professional/medical experts. If there is to be a change in  
the way that international health governance agencies define health then  
it surely is not acceptable in the 21st century for this to be done  
without wide-ranging engagement beyond the esoteric world of academia and  
the pragmatic world of policy. Civil society should have a voice.

3. The authors' new definition of 'health' places undue emphasis on  
individuals and their "ability to adapt and to self manage" irrespective  
of their context. If one accepts that it is worthwhile to pursue a new  
definition amenable to operationalisation - and I am not convinced of this  
- then this process needs to attend to the implications of the burgeoning  
literatures on:  
  
a. the complex concepts of capability, capacity and resilience where  
research points to the importance of conceptualising these as  
characteristics of the relationship between individuals and the socio-political systems in which they are embedded (or even as characteristics  
of these systems themselves) rather than as located with individuals.  
  
b. The role of collective social dynamics and/or relationships in the  
genesis, promotion, management and sustainability of health, wellbeing and  
functioning  
  
c. Lay/patient generated measures of health and health outcomes (e.g  
patient reported outcome measures) which allow individuals to identify the  
domains of health, wellbeing and social functioning that are important to  
them.

The authors argue that the "formulation of health as the ability to  
adapt and to self manage... could be a starting point for a fresh, 21st  
century way of conceptualising human health and that discussion with other  
stakeholders should continue. Indeed it should. I fear that the  
approach proposed by Huber et. al. results in a narrowly individualistic  
psycho-social definition of health. The social determinants approach,  
emphasising political, economic, social and cultural pathways to health  
and health inequalities provides a more appropriate 21st century framework  
to underpin national and global health governance.

**Competing interests:** I participated in discussions at the workshop that the authors Huber et. al. draw on for their article.

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We certainly agree with the recommendation by Machteld Huber et al,  
resulting from a recent meeting of experts at a Dutch conference, that WHO  
update their definition of health and place 'emphasis towards the ability  
to adapt and self manage in the face of social, physical, and emotional  
challenges.'1. We appreciate the concept of 'dynamic balance between  
opportunities and limitations' in the social domain.

However we are concerned that the proposed definition's emphasis on  
personal and community responsibility for adaptation and self-management  
denies the reality that some social determinants may preclude the ability  
of individuals and communities to adapt to their circumstances.

We believe that the authors and WHO would benefit from applying a  
much wider lens to the etiology of health, and therefore increase the  
recommendations to support maximum health around the world. The physical,  
mental, emotional and spiritual health of individuals and communities  
depends on numerous general factors including political conflict and war,  
literacy, education, employment, adequate housing, poverty reduction and  
reducing the income gap within countries - in addition to 'good nutrition,  
hygiene, sanitation and health care interventions'. This means that WHO  
must partner with other international organisations with many different  
mandates to promote health. It should also encourage countries to adopt  
health policies that make it possible for individuals and communities to  
self-manage; as has occurred with smallpox and polio prevention, iodine  
supplementation and, in some jurisdictions, smoking and seatbelt usage.

We also recommend that future writings should lessen the focus on  
'doctors in their daily communication with patients.' The majority of the  
world receives health care from other health professionals, community  
leaders, traditional healers or those with additional knowledge in health,  
as well as family caregivers,

Finally, we are delighted that this article recommends involving  
other stakeholders - and recommend that these should be widened past  
'patients and lay members of the public' to include community leaders,  
health organisations and policy makers.

1. Huber M, Knottnerus JA, Green LW et al. How should we define  
health?  
BMJ 2011;343:d4163

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Re: How should we define health? Huber et al. BMJ 2011;343:d4163

Huber et al. have proposed to reformulate health as the ability to  
adapt and self manage. We support the new definition of health with  
arguments from the fields of occupational health and positive psychology.  
However, the question is whether or not our health system is able to  
broaden its scope and get less problem orientated?

As science and technology advance Huber et al. argument that patients  
with diseases should be helped to adapt and to self manage with their  
physical, mental and social health. We favor this view from our  
experiences in the field of occupational health. In the Netherlands  
occupational physicians not only explore the medical status, but also the  
disease cognitions, contextual work factors and private life of employees.  
This helps employees and employers to cope with disease and impairments.  
One of the key findings is that functioning helps employees to recover  
from illness, whereas postponing return to work results in reduced health  
(1). Employees who have difficulties to adapt and manage their diseases  
and health complaints have high rates of sickness absence, which is of  
major importance for society (2). Our impression is that employers and the  
health care system can do more to help employees with chronic illness (3).

Physicians are trained to recognize symptoms of disease and health  
risks. From the health perspective, it would be worthwhile to pay  
attention to what makes people healthy. Salutogenesis is the term for  
studies (4) how people stay well. However, this approach is not very  
popular in medicine. The same is true for the field of positive  
psychology. The traditional focus of psychology is on people's weaknesses  
and malfunctioning, whereas positive psychology proposes a shift towards  
human strengths and optimal functioning (5). The healthcare system and  
science are mainly focused on negative prognostic factors. An example of  
the contrary is that optimism protects against cardiovascular death (6).  
Another example is engagement; regarding health this is a remarkable  
determinant of mental health: it protects against burnout and contributes  
to well being and productivity (7) and is therefore of importance for  
society. If salutogenesis, optimism and engagement have such health  
benefits, why not giving positive states a greater role in our health care  
system?

In the physical, mental and social dimensions of health mentioned by  
Huber al., we miss the spiritual aspect. They mentioned 'sense of  
coherence' as a factor for successful coping, which includes enhancing,  
comprehensibility, manageability and meaningfulness of a stressful  
situation. This should be worked out. There are studies (8) which show  
that spirituality, seen in its broad meaning and overlapping with positive  
psychology, contributes to a sense of mastery and to physical and mental  
health. Japanese studies (9,10) state that 'ikigai', a Japanese concept  
meaning something worth living for, contributes to reduced risk of all-  
cause and cardiovascular death.

Of great importance in developing and implementing this vision, is  
the ability of the health care system and health care professionals to  
adapt their clinical outlook. Our difficulties in helping patients with  
medically unexplained physical symptoms (MUPS), which can only be  
understood in biopsychosocial context, shows how difficult it is to  
broaden our scope (11). Evidence (12) from the treatment of patients with  
longstanding MUPS shows that these patients want to be taken seriously,  
explanations they understand and this asks other competences, longer but  
less frequent consultations and that this will result in less medical  
consumption and better functioning.

To conclude, we acclaim that health should be seen as a ability of  
patients to self manage disease within their social context, rather than  
being free of disease or complaints.

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While the response(1) of Shilton et al from the International Union  
for Health Promotion and Education is correct in pointing out that health  
is a social product rather than an individual attribute, their proposed  
definition is unhelpful - its final part is a tautology, which makes the  
meaningless claim that 'Health is created when... (people's) needs and  
rights are supported by systems... conducive to better health'. Like the  
WHO Commission on Social Determinants of Health(2), they also fail to  
point out that the inequity which as they say, rations global access to  
health, is a systematic product of the neoliberal capitalism which so  
dominates global public policies and international relations. We must  
engage with these realities if we wish to create better health in the  
world.

I would propose instead a (thus far unpublished) definition of health  
coined in 1996 by Jane Wills, Nigel Watson and myself: 'Health is a  
condition in which people achieve control over their lives due to the  
equitable distribution of power and resources. Health is thus a collective  
value; my health cannot be at the expense of others, nor through the  
excessive use of natural resources.' This definition is more in keeping  
with the WHO's prerequisites for health for all(3) - equal opportunities  
for all, satisfaction of basic needs (adequate food and income, basic  
education, safe water and sanitation, decent housing, secure work, a  
satisfying role in society), peace and freedom from fear of war - and with  
current perspectives on sustainability.

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The meaning of health  
Trevor Shilton, Michael Sparks, David McQueen, Marie-Claude Lamarre,  
Suzanne Jackson;  
(On behalf of the Executive Committee of the International Union for  
Health Promotion and Education - IUHPE).

Your article by Huber et al (26 July, 2011); BMJ 2011; 343: d4163,  
quite properly challenges the validity, in the 21st century context, of  
the WHO definition of health. For the health promotion movement this  
consideration is particularly pertinent in the year of the 60th  
anniversary of the founding of the International Union for Health  
Promotion and Education). The IUHPE is pleased to be able to contribute  
to the ongoing global conversation on a new definition of health.

A challenge for any new definition of health is to be broad enough to  
have appeal across sectors, yet not so broad as to become meaningless or  
unachievable. The meaning of health proposed in the Huber et al article  
promotes health as a reactive capacity where a threat to health is  
present. We agree that adaptation and self-management are important  
qualities for individuals to have when faced with ill health but our  
definition of health extends beyond the concept of health as a reactive  
capacity to include concepts of health being both a human right protected  
by certain entitlements, and health as a resource for life that is  
affected by social, political, economic and environmental factors.

Public Health has always worked on the premise that changes to these  
types of environment result in greater health gains than any individual  
action. Indeed, our ability to 'adapt and self-manage' is applicable only  
in circumstances that are within our control. Because of inequities, many  
of the contemporary problems that are the drivers of ill health in low and  
middle income countries are outside the control of the dispossessed, the  
poor and the disenfranchised. While we can see the therapeutic approach in  
which adaptation and self-management are desirable, particularly in  
wealthy developed countries, we fail to see how this approach offers  
significant hope to less advantaged populations. Any definition of health  
must therefore recognise the impact of this fundamental and growing  
inequity.

To make meaningful differences for those that need them most, we need  
systems approaches to policy, legislation and environments - not just  
individual approaches to behaviours. We agree that a fundamental change in  
addressing health is required, but such change needs to consider  
underlying determinants that are less amenable to self-management, and  
consider change to policies and environments. This is the purview of  
policy decision makers rather than consumers and individuals.

An alternative definition:  
Health is created when individuals, families and communities are afforded  
the income, education and power to have control over their lives; and  
their needs and rights are supported by systems, environments and policies  
that are enabling and conducive to better health.

We draw your attention to a document from the International Union for  
Health Promotion and Education (IUHPE) that outlines seven actions that  
advance health promotion approaches to NCDs. We are pleased to attach a  
link to this document:

[http://www.iuhpe.org/uploaded/Activities/Advocacy/IUHPE\_KeyMessagesNCDs\_...](http://www.iuhpe.org/uploaded/Activities/Advocacy/IUHPE_KeyMessagesNCDs_WEB.pdf)

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Michael Sparks, David McQueen, Marie-Claude Lamarre, Suzanne Jackson

International Union for Health Promotion and Education

There is a colossal omission in Huber et al's discussion of  
redefining health, which they allude to and then skate over at the end of  
their article . "Just as environmental scientists describe the health of  
the earth as the capacity of a complex system to maintain a stable  
environment within a relatively narrow range, we propose the formulation  
of health as the ability to adapt and self manage". Indeed....But where  
is the recognition that the Earth is our only home, and the ultimate  
source of everything that helps us maintain our health? As fish stocks  
dwindle, the human population continues to expand beyond the carrying  
capacity of the planet, aquifers dry up, and climate change disrupts the  
weather cycles on which we have come to depend for food production, we are  
showing ourselves to be singularly incapable of looking after our  
irreplaceable life-support system.

A short term 'definition of health' which fails to include any  
reference to our ability as a species to consider our own prospects for  
long term survival , seems to me a worrying symptom of the denial, focus  
on 'business as usual' and inability to consider the imperative for  
radical behavioural changes, which are responsible for the profoundly  
worrying predicament in which we and most other higher forms of life on  
Earth now find ourselves. A new definition of health feels like a sterile  
academic exercise when the obvious threats to health of famine,  
pestilence, war ,and the immediate effects of climate change are now so  
clearly  
what should really concern us.

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ACE health.

The fairly recent biological concept of "complex adaptive systems" (as summarised in the Institute of Health's "Crossing the Quality Chasm", published in 2001. ISBN 0-309-07280-8) provides an excellent basis for an updated understanding of health.

All organisms can be considered as "complex adaptive systems", human beings included. Such systems have distinct characteristics, probably the most fundamental of which is the capacity to adapt. However, it would be limiting to equate adaptive processes to homeostasis. There are many homeostatic mechanisms in living organisms, but other characteristics include the non-linearity of the connections between the parts and the systems, which produces novel and emergent behaviours; a tendency for the system to move to "far from equilibrium" positions which stimulates phase changes and growth; and embeddedness within the organisms environment.

This means that both growth and relationships are key features of health.

Maturana and Varela coined the word "autopoeisis", (<http://en.wikipedia.org/wiki/Autopoiesis>) sometimes translated as "self-making capacity" and this is perhaps a broader and more useful one than "self-management".

I find the acronym "ACE" helpful as a definition of health.  
  
A = adaptive capacity (physical and psychological coping)  
  
C = creativity (growth and development)  
  
E = engagement (interactions with others and with the environment).

<http://heroesnotzombies.wordpress.com/adapt-create-engage/>

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