
HEALTH PROMOTION FROM THE ROOTS***Douma Annewiet and Guglielmi Ivan**

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Abstract

Over the past decades, chronic diseases and changes in lifestyles have increasingly contributed to the global burden of morbidity, both in developed and developing countries. Within the guidelines of the WHO, health promotion aims to provide guidelines to enhance health control and status. Currently there are multiple models that attempt to explain the phenomenon of health and disease in the population, although they contribute to having a stratification of the sick or possible population of disease, it is important to properly understand the approach of the roots of health and disease. That is why we consider it important to answer two questions: What is health? What are the central roots of health and disease? Therefore, this essay provides a reflection that focuses on five main axes, which in our opinion lie in the Environment, Resources, Consciousness, Meaning and Love and how these axes from a chaos / dynamic theory perspective of the system, redefining health and health promotion efforts based on the knowledge of the "initial conditions", seems to provide great potential to positively impact health on a global level. Thus redefining the limits of health promotion by dedicating more time, energy, and resources to identifying and strengthening the roots of health is promising for the future of our planet.

Keywords: Policy Development Plan, Growth-Inequalities Matrix, Development Zone.

INTRODUCTION

Through the last decades, chronic lifestyle diseases have increasingly contributed to the global burden of disease, both in developed and in developing countries (Lopez and Murray, 1998; WHO, 2008). A large share of public attention, medical care and financial resources is dedicated each year to decrease this global burden of disease and promote health. The health promotion field has seen a dynamic development through the course of history. According to the World Health Organization, the core purpose of health promotion is enabling people to increase control over, and to improve, their health (Nutbeam *et al.*, 1998). In order to guide people in this process, one must understand what actually causes health and disease and what changeable factors and behaviors are involved. With regard to understanding and predicting health behaviors many different theories and models have been created. From linear models, such as the Health Belief Model and the Theory of Planned Behavior, to ecological models, and eventually the complex and non-linear Dynamic Systems Theory and Chaos Theory. The linear models often fall short in their predictive power (Sniehotta, Presseau and Araújo-Soares, 2014) and the behavioral interventions that result from them often fail to provide results in other settings than the original one (Poland, Krupa and McCall, 2009). Perhaps health behaviors are best understood through the lens of Dynamic Systems Theory and Chaos Theory. Key principles include that health behaviors (1) are often quantum events; (2) can resemble chaotic processes that are sensitive to initial conditions, highly variable, and difficult to predict; and (3) occur within a complex adaptive system with multiple components, where results are often greater than the sum of their parts (Resnicow and Page, 2008). Basically, health behaviors are so complex that it is virtually impossible to predict them.

Maybe we should stop trying to predict them and focus our health promoting attention elsewhere. A potentially promising concept involves the existence of initial conditions (or seed values). A change in these root conditions can have widespread, unforeseen, and unpredictable consequences. This process is commonly known as a rippling effect or the "butterfly effect" (Resnicow and Page, 2008). If we could adequately identify the roots of health and disease, we could potentially adapt these roots, and thereby initiate wide-reaching health-promoting butterfly effects. The aim of this essay is to answer 2 key questions that emerged from the desire to create such health promoting butterfly effects.

1. What is health?
2. What are the core roots of health and disease?

What is health?

In 1948, the World Health Organization published their current definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (WHO, 2006). Based on this definition, it appears almost impossible to experience health. In 2011, Huber and colleagues proposed a more dynamic perspective of health, focusing on the ability of individuals to adapt and self-manage when confronted with social, physical, and emotional challenges (Huber *et al.*, 2011). The latter perspective appears to fit best with the outlined basis of this essay. This new dynamic health perspective resulted in the development of the Positive Health Model. This model consists of 6 dimensions: Physical Functioning; Mental Health; Meaning; Quality of life; Social Participation; and Daily Routine. During the course of their life, people constantly face struggles in one or more of these interdependent dimensions. It is crucial to their well-being to learn how to deal with such challenges and develop coping mechanisms. Learning how to cope with health challenges can be viewed in a positive light, since every challenge provides an opportunity for personal and social

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development and can make people more resilient and adaptive. A striking example is the Australian motivational speaker, Nick Vujicic, who was born with tetra-amelia syndrome (Vujicic, 2007). He has no arms, nor legs, but only a deformed foot. He was bullied as a child and even attempted suicide. Nevertheless, he managed to learn to swim and to use his foot to operate an electric wheelchair, a computer, and a mobile phone. Moreover, he is the father of 4 healthy children. Building up on this, one could argue that the experience of illness, pain, and suffering also intensifies the experience of health, relief and joy. Only because people experience disease, they know what it actually means to be healthy.

The contrast gives meaning to both health and disease. Perhaps it is time to view health challenges as growth opportunities in the health promotion field. This goes directly against the dystopian future sketched by Zeh in her book "The Method". There, physical health is displayed as the highest, conceivably the only political virtue. Disease is seen as an obscenity, and failure to take all reasonably possible precautions against illness is deemed a crime (Zeh, 2012). The positive health perspective underscores that the real-life perception of health involves so much more than only the experience of physical functioning and continuing health promotion efforts should be in line with this thinking.

What are the core roots of health and disease?

Pinning down the roots of health and disease on a few pages has proven to be quite the challenge. Nevertheless, a literature search, brainstorming in company and multiple personal reflections have resulted in 5 general themes. Namely, the environment, resources, awareness, meaning and love. Of course one could argue that our genetic make-up can also be considered as an important root. However, since it is not (yet) perceived as changeable on a large scale it will not be discussed here.

Environment

A person's environment greatly influences the manifestation of health and disease. All sorts of environmental factors, such as air pollution, radioactive contamination, and toxic chemicals are correlated with the development of a variety of diseases (e.g. infections and cancer). It is estimated that 25-33% of the global burden of disease can be attributed to environmental risk factors (Smith, Corvalán and Kjellström, 1999). Therefore, the environment can be seen as an important root of health and disease.

Resources

In order for a person to experience physical health, certain basic needs have to be met. Such as adequate standards of nutrition, shelter, water and sanitation (Streeten, Burki, Haq, Hicks, and Stewart, 1981). Moreover, in our current world systems, obtaining these basic needs greatly depends on whether a person owns sufficient resources. Either in the form of financial capital or natural resources (e.g. home grown vegetables etc). In addition, a strong body of research highlights the inverse relationship between a low socioeconomic status (SES) and unhealthy behaviors such as poor nutrition, physical inactivity and tobacco use (Pampel, Krueger, and Denney, 2010). Explanations for this relationship include i.e., chronic stress, financial loss, unemployment,

perceived scarcity, class distinctions, discrimination, and a lack of knowledge (Pampel et al., 2010). However, root causes here that initiate a great share of these struggles appear to be financial poverty and a lack of (natural) resources.

Awareness

In order for a person to make healthy choices and pursue a lifestyle that favors health, one needs to be aware of what actually promotes health and what causes disease. According to the I-Change model (which integrated many health behavior theories), the initial roots of motivation, action and ultimately behavior change include awareness factors (De Vries, 2017). Awareness about the existence of health risks, awareness of the health behavior state, and knowledge about the risks all contribute to the development of a general level of awareness to pay attention to health topics and communication about it (De Vries, van Osch, Eijmael, Smerecnik, and Candell, 2012). Subsequently, this general level of health related awareness could be considered an important root of health and disease.

Meaning

In order for a person to feel intrinsically motivated to live a healthy and long life, a sense of meaning seems essential. According to Baumeister (1991) this sense of meaning comprises of 4 vital needs. Namely, a sense of *purpose*, feelings of *efficacy*, personal actions of positive *value*, and a sense of positive *self-worth*. The perception of a meaningful life is associated with life satisfaction, enjoyment of work, happiness, positive affect, hope, physical health and general well-being (Stillman et al., 2009). People who perceive their life as meaningful often have a clear purpose, goals to achieve and dreams to chase. A lack of meaning on the other hand, is associated with psychological disorders, stress, depression and suicidal ideation (Stillman et al., 2009).

Love

In order for a person to care for oneself and the people around, love appears to be a vital root. Maturana and Verden-Zoller claim that love is the fundamental emotion that gave rise to human evolution (Maturana and Verden-Zöller, 2008). Unfortunately, it is practically impossible to quantify love. Therefore, it is a rather neglected concept in academic science. However, based on common sense, one could argue that love might be one of the most vital roots of health. Fetal development is a crucial period, very sensitive to environmental and epigenetic influences, which can lead to an increased risk of disease in adulthood (Chen and Zhang 2011). This emphasizes how especially important healthy parental lifestyle choices are in this vulnerable period. The love of a mother for her (unborn) child is a strong force that drives her to make responsible lifestyle choices and learn more about what is best for the child. On the other hand, a lack of parental love often leads to careless and negligent behaviors (Harrington, 2016). Child neglect can seriously impair cognitive development and give root to all sorts of physical and mental health problems (Dubowitz and Bennett, 2007). Moreover, self-compassion and self-acceptance, which could be seen as closely related to self-love, are associated with health promoting behaviors (e.g. eating habits, exercise, sleep behaviors, and stress management) (Sirois, Kitner and Hirsch, 2015).

Conclusion

The ambitious goal of this essay was to identify the roots of health and disease. The environment, resources, awareness, meaning and love were thought to be the core roots or initial conditions of health and disease. It is evident that the methods used to answer the presented questions might have been very insufficient. They also covered a scope that is fairly difficult to channel into a few pages. Moreover, many issues might have been oversimplified, but that was a necessary evil in an attempt to answer such broad questions. Nonetheless, from a chaos theory/ system dynamics perspective, redefining health and developing health promotion efforts based on knowledge of “initial conditions”, appears to provide great potential to positively impact health and disease worldwide. After identifying some of the presumably most important roots of health, the logical next step is to explore efforts that could potentially adapt these roots. However, elaborately exploring possible interventions targeting the roots goes far beyond the scope of this essay. A few suggestions for different levels of society will have to suffice. One could say that we can positively influence the roots by nourishing them. What nourishes the environment, resources, awareness, meaning and love?

On a governmental level, a circular economy for example, in combination with strong legislation against polluting emissions (Geissdoerfer, Savaget, Bocken and Hultink, 2017). Such an economy could lead to a more sustainable environment, healthier food production and also reduce the social inequalities and health disparities. On a community level, projects could include the practical implementation of the positive health model in daily medical practice since this can help to create health-related awareness and increase the sense of meaning among patients. In the Netherlands health professionals have reported positively about using the model in their practices (Backhaus, 2015). On the interpersonal level, people can be encouraged to nourish the roots of health in their family and social circle. They can do so in many daily actions, no matter how small. By smiling to a neighbor, taking time for in depth conversations with their children, starting a vegetable garden etc. In conclusion, embracing the positive health perspective and viewing health challenges as growth opportunities could create more fertile ground for chaos theory/system dynamics approaches within the Health Promotion field. Furthermore, redefining the boundaries of health promotion and devoting more time, energy and money to identifying and strengthening the roots of health holds promise for the future. If the roots or initial conditions are successfully adapted, we may be amazed by far reaching health-promoting butterfly effects. Behavior change on a large scale could follow naturally and unpredictably.

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