Core session

Full paper

Title: "Health and Degrowth", a new paradigm in the field of sustainability

Thematic threads: organizing society (societal organization and coordination beyond growth; social movements, selforganized projects).

Narrative steps: the paper covers the three steps, in descendent order. Visions and strategies for transformation; facing the current crisis: critique & resistance; building alliances.

Key words: health, degrowth, sustainability, medicine, determinants of health.

Abstract

The current model of development is not compatible with protection and promotion of health of present and future generations. It is necessary to question and overturn the current economic system, implementing, both in health and generally, the degrowth theory.

We will describe the paradigm of "Health and Degrowth" and propose four steps in order to achieve it, deriving from the application of the virtuous circle of eight R's on health (S. Latouche).

1) Re-evaluation and reconceptualization of the ideas of health, illness and care.

2) Restructuring health services following the new health conceptualization, appropriateness, primary health care model (relocalization), independence from big stakeholders, a systemic, global and multidisciplinary approach.

3) Health promotion and prevention acting on socio-economic, environmental and cultural determinants of health.

4) Involvement of citizens and patients in health management.

The experience of the new-born "Italian network for Health and sustainability" will be presented.

Introduction

The myth of growth pervades every aspect of our society and imaginary. Obviously, the concept of health is not immune from the influence of this totalitarian paradigm. Ivan Illich, more than 30 years ago, deeply analysed the relationship between medicine and industrial expansion: "*Increasing and irreparable damage accompanies present industrial expansion in all sectors. In medicine, this damage appears as iatrogenesis* (Illich, 1976)". The author described how the medicalization process carried out by the health system causes not only a clinical iatrogenesis (pain, illness and death result from medical care), but also social and cultural damages. Social iatrogenesis takes place "when medically sponsored behaviour and delusions restrict the vital autonomy of people by undermining their competence in growing up, caring for each other, and aging, or when medical intervention cripples personal responses to pain, disability, impairment, anguish and death" (Illich 1976).

Unfortunately, in spite of the words of caveat written by Ivan Illich, few studies have been conducted on the relationship between health and degrowth. However, in the last years this theme has started to be re-discovered by some researchers. Borowy (2010, 2013) conducted an interesting analysis on the situation of Cuba "after the collapse of the communist bloc in the 1990s". In that period there was a severe economic crisis (drastic reduction in fuels, negative economic growth due to declining production and consumption rates), but at the same time, "tangible positive effects on public health have been remarked, including decreased death rates due to diabetes, coronary heart disease and stroke". The author identified "consistent commitment to social services, a shift in agricultural methods and a high level of social capital as main reasons for this outcome". In addition Bednarz and Beavis (2010) propose a renovation of health services structures in order to reduce complexity and maintain efficiency despite limited availability of resources. The

authors identify the concept of "localization" as theorized by Illich as a fundamental element for a future degrowth society.

The nexus between health and degrowth has also been the focus of a workshop in the 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity, where several contributions to the subject have been proposed. Aillon initially tried to conceptualize the theoretical frame of "Health and Degrowth" and described the practical project "Doctors for Degrowth" (carried out by the Italian Movement for Happy Degrowth), aimed at explaining how to concretely apply these principles in clinical practice (Aillon 2012). Dal Monte underlined the reasons of the unsustainability of the actual "prometheic" healthcare model, in particular with reference to "diminishing marginal returns" (Dal Monte 2012). Similarities and connection with the "Slow Medicine" approach were exposed (Dolara 2002, Gardini 2012), such as the importance of social determinants of health (equity), appropriateness of treatment (sobriety) and respect and centrality of the person. Further contributions from medical students were also discussed (Ferrari 2012).

Finally, even without situating his analysis in the context of degrowth, the book of Marco Bobbio (2010) results to be relevant to the actual debate. The author, with an evidence-based approach, developed a deep critique towards a medicine without limits which spreads fear of diseases reasonless, induces needs of unnecessary therapy and distances itself from the suffering person reducing him/her to a set of altered parameters.

Although several authors have been studying the link between health and degrowth in the last years, the relationship between these two concepts has not been systematically analised yet. This paper attempts to systematize the existing knowledge in the health field into the theoretical frame provided by the degrowth theory, thus creating the bases of what we might refer to as "Health and Degrowth" paradigm.

"Health and degrowth": a new paradigm in the field of sustainability

Serge Latouche describes degrowth as a political slogan with theoretical implications aimed at strongly underlining the necessity to "abandon the dogmatic goal of exponential growth". It is not negative growth. It could be defined as "a-growth" (like atheism), in the sense of abandoning the absolute faith in growth, progress and development (Latouche 2007, 2009). The myth of growth pervades every aspect of our economy, society and imaginary. Health and the heath system are not an exception. Hence, we think that it is possible and necessary to use the lens of the degrowth theory to scrutinize health with the objective to propose a different approach, that might be called "Health and Degrowth".

What does it mean to abandon the faith in growth in the field of health? This process envisages an overturn of the mechanism of growth and its effects, both material and cultural, on health, thus modifying the concept of health, the health system and healthcare. Human beings (and environment) are nowadays only gears of a machine whose aim is uniquely to produce more and more, in order to increase Gross Domestic Product (fig. 1). Degrowth, in this context, attempts to invert this mechanism and put at the centre of the system humans needs, while economy will be reduced to a mean to achieve full realization of human beings (on a qualitative level and not just on a quantitative one), compatible with biosphere limits.

A similar dynamic could be applied to patients and, generally speaking to human beings, concerning health. Patients, as well as human beings, are often gears of an economic system focused more on GDP growth and satisfaction of stakeholders' interests (measured with objective and quantitative methods) than on their health (fig. 2). The implementation of the "Health and Degrowth" approach consists in the rupture of the chains of economic pressure on health (health concept, health system and healthcare) and would put the patient/individual and his/her needs at centre of the system. In this framework, the "health machine" and the underlining economic system would strive for a real and full health of people – defined by WHO as complete physical, mental and social well-being (1946) – in dynamic

harmony with the environment and, thus, sustainable in the long term, as foreseen by bioeconomy theory (Georgescu-Roegen 1971).

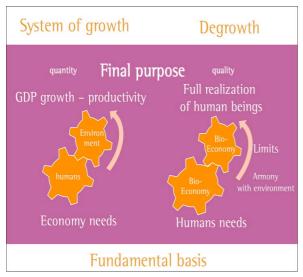


Fig. 1 The transition from growth to degrowth.

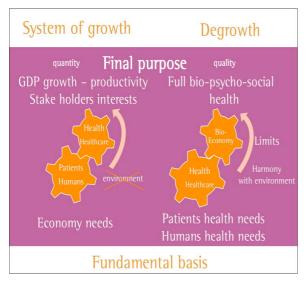


Fig. 2 The transition from growth to degrowth ("health and degrowth") in the health field.

From the eight R's to the four steps

Latouche, in order to build a degrowth society, proposes eight interdependent changes, called the virtuous circle of eight R's: re-evaluate (the vision of the world, decolonizing our imaginary from growth ideology); reconceptualize (adopting new values); re-structure (the productive apparatus); redistribute (money, land and work); re-localize (local basis of economy and politics); reduce (overconsumption, wastefulness, mass tourism, displacements and work time), reuse and recycle. In this work we will present four steps, derived from the application of the eight R's to the health field (fig.3):

- 1) Re-evaluation and reconceptualization of the ideas of health, illness and care
- 2) Restructuring health services following the new health conceptualization
- 3) Health promotion and prevention
- 4) Involvement of citizens and patients in health management (active citizenship).

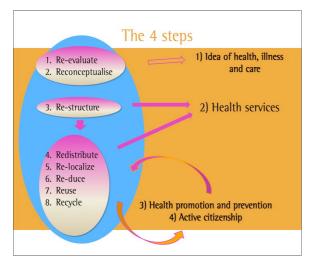
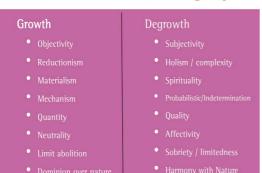


Fig. 3 From the 8 R'S theorized by Latouche to the 4 steps of "Health and Degrowth"

1) Re-evaluation and reconceptualization of the ideas of health, illness and care

Applying the degrowth frame into the health field would mean first to "decolonize its imaginary" (Latouche 2007) from growth colonization. That should imply, besides a change in medical practice, a re-evaluation of certain values and epistemological principles, which are still nowadays the basis of scientific medical knowledge (Fig. 4). Paradoxically most of these epistemological assumptions have already been disproved by the best scientific literature, but are nevertheless still the foundations of common medical practice. For example, it is common in clinical work to believe that results of analysis or scientific studies are objective (that they are the "truth") and that our body is a big clock that we can reduce in small parts which could be physically analysed to understand the whole clock. This perspective corresponds to the Newtonian approach to science, that it is nowadays updated. In fact, we actually know that it is impossible to have a firm and objective knowledge of the physical world, because of the principle of uncertainty theorized by W. Heisemberg (1930). As a matter of fact, our measuring devices alter the phenomena that we are analysing. Furthermore, universe is not as simple as a clock, with linear causal relationships between its components: in Quantum Theory we assist to chaotic dynamics that we can predict only with probability, but not with certainty. In addition, the science of complexity and the systemic approach stress the concept that we cannot reduce complex phenomena to simpler ones believing to understand them completely, and affirm that it is necessary to consider phenomena in their complexity, in a holistic way within the relationships they entail with the surrounding environment (Plsek 2001, Miles 2009).



Decolonization of Health Imaginary

Fig. 4 The decolonization of the health imaginary

These evidences demonstrate that there is the need to develop a new model of health, illness and care, that:

- See health not as the mere absence of disease caused by medical intervention but as a dynamic equilibrium resulting from several external (e.g. socio-economic-environmental and cultural factors) and internal determinants (e.g. psychological factors as "resilience" and "sense of coherence"; Antonovsky 1987).

- Move the focus of interest from pathogenesis (searching causes of diseases and treat them) to salutogenesis. Salutogenesis is aimed at searching factors that cause healthiness and promoting them both collectively and individually (Antonovsky 1987; Alivia 2011). Moreover, it considers health and disease as two poles of a single process, where illness does not become an enemy to eliminate and destroy, but provides also a great opportunity for development, where overcoming illness becomes the foundation for a better future health (Alivia 2011).

- Consider the person in a holistic and systemic perspective, as a bio-psycho-socio-cultural and spiritual subject in continuous relationship with the surrounding physical and relational environment (Bateson 1972, Engel 1977, Brody 1999, George 2000, Suls 2004, Roberti di Sarsina 2010).

- Put in the middle of the therapeutics/care process the relationship between health workers and patient, going beyond the neutrality of the "scientific approach", promoting the possibility of an emphatic, authentic and affective relationship (Stewart 2003, Roberti di Sarsina 2010).

- Try to use the necessary reductionism without renouncing to contemplate the complexity (and thus subjectivity) of the whole phenomenon (Albrecht 1998, Plsek 2001, Miles 2009).

- Recognize the limits of medicine and science, promoting an approach that consider human beings as a part of nature (and health as a result of this equilibrium), and not simply nature as something to dominate with the technology and progress (Illich 1976, Bobbio 2010).

These principles, in medicine, have been deeply analysed by Roberti di Sarsina et al. with what they called the "Person-Centred Medicine Paradigm" (Roberti di Sarsina 2010, 2013). Person-Centred Medicine "is a humanistic and at the same time evidence-based approach. It allows for that individual psycho-physical equilibrium which is the basis for any sustainable equilibrium in society at present or in the future (responsibility). Person-Centred Medicine calls for wider medical knowledge and practice, not only of how to treat pathology but how to generate health (salutogenesis). It is a systemic approach and adopts a unitary view of sentient being and the world. The Person Centred Medicine Paradigm aims to incorporate the holistic approach, the relationship-based care and the treatment systems of biomedicine into the technological advances of mainstream medicine in order to provide more personalised and sustainable healthcare." (Roberti di Sarsina 2013).

2) To restructure health services following the new health conceptualization

The second step consists in restructuring the health services following the new health paradigm. In particular, besides the cultural changes exposed above, it will be fundamental *to redistribute* the resources of the health system, *re-localize* health care, *reduce* overconsumption of drugs, procedures and wastefulness, and *to reuse/recuperate* other medical knowledge (fig. 3).

a) To redistribute the resources of the health system

Health is a fundamental right (art. 25 of the Universal Declaration of Human Rights) and health system should be considered as a common good of which every people can benefit. That calls for a National Public Health System, where there should be equity in the access and the allocation of resources.

b) To re-localize health care

To implement this new health paradigm there will be the need to re-localize healthcare. This would require a change of perspective from a hospital-based to a community medicine approach, implementing the model of "primary health care" advocated by the World Health Organization (Declaration of Alma-Ata 1978, WHO 2008).

c) To reduce overconsumption of drugs, procedures and wastefulness (de-medicalisation)

As for general goods, there is nowadays a sort of "medical consumerism" driven by media and big pharma companies. People are pushed to feel sick even if they are not and to use more and more pills, to do more and more exams and medical procedures, a form of medicalization now described as "disease mongering", namely "extending the boundaries of treatable illnesses to expand markets for new products". "Alliances of pharmaceutical manufacturers, doctors, and patients groups use the media to frame conditions as being widespread and severe. Disease mongering can include turning ordinary ailments into medical problems, seeing mild symptoms as serious, treating personal problems as medical, seeing risks as diseases, and framing prevalence estimates to maximise potential markets extending the boundaries of treatable illness to expand markets for new products" (Moynihan 2002, Don 2008). Overprescription of some medicines (e.g. antibiotics or painkillers) is very common, even though in most cases prescribed drugs result to be useless and sometimes harmful. In particular, overprescription of antibiotics is evident in the community as well as in hospitals, in veterinary practice or in agriculture with a prevalence that range from 20 to 50% (Wise 1998, Sternon 1999). Recent research studies show, for example, that physicians often prescribe antibiotics for adults with a sore throat, nearly in 60% of the cases considered (Rita 2014), although only about 10% (those with group A Streptococcus) are likely to benefit from the treatment (Bridjet 2013, Barnett 2014).

The actual campaign "Choosing Wisely"¹, carried out by nine medical specialty societies in the United States, and the initiative "Fare di più non significa fare meglio" (doing more does not mean doing better), carried out by the Association Slow Medicine in Italy,² are denouncing this problem, advocating for reduction of unnecessary tests, procedures and treatments and promoting appropriate ones.

Some estimates suggest that as much as 30% of all health care spending is wasted (Berwick 2012). Often an appropriate and higher quality treatment is also a less expensive one (Ovretveit 2009). In this context, as Maurizio Pallante theorized concerning "happy degrowth", less could be better (Pallante 2011). If we renounce to a commodity (an object or service that we buy with money) that is not a good (an object or service that fulfill a need or a desire), Gross Domestic Product (GDP) decreases, while our wellbeing as well as the one of the planet increase (Pallante 2009). Hence, a selective demedicalization could be seen as a degrowth practice.

In order to achieve this objective it is necessary to promote more independence of health workers and health system from the market of drugs and medical devices ("Big Pharma"), freedom from conflict of interests and corruption. Interesting projects in this regard have been carried out in Italy by the association "No grazie Pago Io" (No, thanks, I am paying for myself),³ a group of health workers who refuse any kind of gifts from pharmaceutical companies, fighting against the influence of market on health and promoting counter-information in this field. Similar activities have been developed by the Australian organization "Healthy Scepticism".⁴

¹ ABIM Foundation, Choosing Wisely, [internet] available at: http://www.choosingwisely.org/

² Slow medicine, [internet] available at: http://www.slowmedicine.it/

³ No Grazie Pago Io, [internet] available at: http://www.nograzie.eu

⁴ Healthy Scepticism, [internet] available at: http://www.healthyskepticism.org.

d) To reuse/recuperate other medical knowledge

Nowadays, the scientific paradigm of the evidence-based Western medicine is dominating the health dimension, giving little space and often discrediting complementary and alternative medicine. The decolonization of our imaginary from this "culture of science" would contribute to reuse other medical knowledge, both concerning old traditional practices as well as other complementary and alternative medicines. Over 100 million Europeans are currently traditional and complementary medicine (T&CM) users, with one fifth regularly using T&CM and the same percentage preferring health care which includes T&CM. Furthermore, there is a significant demand for T&CM practices and practitioners worldwide (WHO 2014). Some evidences demonstrate the evidence-based clinical efficacy of several T&CM practices on the cure of certain diseases. Moreover, there is an emerging evidence of the cost-effectiveness and possible cost savings in at least some clinical populations (Herman 2012). Hence, a degrowth approach would mean to promote synergies between T&CM and conventional Western medicine and, as WHO advocates, to move towards the integration of T&CM into health systems (WHO 2002, 2014). The holistic approach, typical of T&CM, is also very useful for an individualized care and health promotion, as shown by person-centred medicine paradigm (Roberti di Sarsina 2007).

Finally, it will be important also to reuse/recuperate our ability of self-care, both with conventional and unconventional medicine (Illich 1976), and to reuse and recycle health material when possible (e.g. sterilizing surgical instruments instead of using disposable ones).

3) Health promotion and prevention

This step consists in restructuring society following the "health and degrowth" conceptualization in order to prevent diseases and promote health. Health promotion, as defined by the Ottawa Charter, "is the process of enabling people to increase control over, and to improve, their health. To reach a state of complete physical, mental and social well-being, an individual or group must be able to identify and to realize aspirations, to satisfy needs, and to change or cope with the environment [...]. Therefore, health promotion is not just the responsibility of the health sector, but goes beyond healthy life-styles to well-being". "The fundamental conditions and resources for health", the prerequisites for health, "are peace, shelter, education, food, income, a stable eco-system, sustainable resources, social justice, and equity. Improvement in health requires a secure foundation in these basic prerequisites" (WHO 1986).

In order to achieve these goals it is fundamental to act both individually and collectively on "determinants of health". Determinants of health are the factors that, combined together, affect the health of individuals and communities. "Whether people are healthy or not, is determined by their circumstances and environment. To a large extent, factors such as where we live, the state of our environment, genetics, our income and education level, and our relationships with friends and family all have considerable impacts on health, whereas the more commonly considered factors such as access and use of health care services often have less of an impact. The determinants of health include: the social and economic environment, the physical environment, and the person's individual characteristics and behaviours" (fig.5).⁵ Our health depends from non-modifiable factors (age, gender and hereditary factors) in a percentage of 15%. The other part is related to modifiable factors. In

⁵ World Health Organization, [internet] available at http://www.who.int/hia/evidence/doh/en/

this context, only a little part of our health depends on heath care services (nearly 25%), while the bigger part depends on socio-economic factors (e.g. income and social status, unemployment, educational level, social support networks) and cultural factors (e.g. lifestyle, customs, traditions, belief about health), accounting for 50%. Furthermore the environment (safe water, clean air and soil, healthy workplaces, soil/food production, safe houses, communities and roads) accounts for another 10% (The Standing Senate Committee on Social Affairs, Science and Technology 2001, Mikkonen 2010).⁶

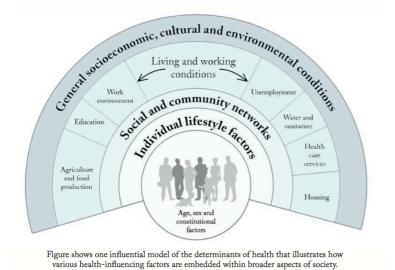


Fig. 5. The determinant of Health (Dahlgren and Whitehead 1991)

"Health promotion action aims at making these conditions favourable through advocacy for health". "It focuses on achieving equity in health [...] at reducing differences in current health status and ensuring equal opportunities and resources to enable all people to achieve their fullest health potential" (WHO 1986). Hence, to promote health better health care services are not sufficient, but, above all, we need more equity in the society, better living and working conditions, stronger social and community network, healthier lifestyles and environment protection. In order to achieve these objectives it is necessary to build an alternative cultural paradigm and to restructure the whole society adopting single individual changes combined with global politics actions. In fact, "the prerequisites and prospects for health cannot be ensured by the health sector alone. More importantly, health promotion demands coordinated action by all concerned: by governments, by health and other social and economic sectors, by nongovernmental and voluntary organizations, by local authorities, by industry and by the media" (WHO 1986). It "involves, in addition to the health sector, all related sectors and aspects of national and community development, in particular agriculture, animal husbandry, food, industry, education, housing, public works, communications and other sectors; and demands the coordinated efforts of all those sectors" (Declaration of Alma Ata 1978).

"Caring, holism and ecology are essential issues in developing strategies for health promotion" (WHO 1986)".

⁶ World Health Organization web site: http://www.who.int/hia/evidence/doh/en/

4) Involvement of citizens and patients in health management (active citizenship)

We can consider this step as the counterpart of the re-localization of politics described by Latouche (2007) and linked with the process of active local citizenship that the author proposes. As a matter of fact, as Latouche emphasised the need of a participated and local management of the common good, here we advocate for an involvement of citizens and patients in health management, at the clinical level as well as at the political one concerning all fields related to health, embracing a vision that considers the health system as a common good to be actively managed by citizens.

"The people have the right and duty to participate individually and collectively in the planning and implementation of their health care [...]. Primary health care requires and promotes maximum community and individual self-reliance and participation in the planning, organization, operation and control of primary health care, making fullest use of local, national and other available resources; and to this end develops through appropriate education the ability of communities to participate" (Declaration of Alma Ata 1978). "Health promotion works through concrete and effective community action in setting priorities, making decisions, planning strategies and implementing them to achieve better health. At the heart of this process is the empowerment of communities, their ownership and control of their own endeavours and destinies. Community development draws on existing human and material resources in the community to enhance self-help and social support, and to develop flexible systems for strengthening public participation and direction of health matters".

The 8 R's together with the 4 steps

It would be impossible to put into practice the 4 steps without carrying out in the whole society the degrowth process. It is not possible to decolonize health imaginary without decolonizing imaginary from growth. Similarly, it would be impracticable to restructure health care services and society acting on determinants of health (equity, social support, environmental protection, etc.) without reorienting the whole socio-economic system towards a degrowth perspective. How can we promote a community medicine without a community or enhance active citizenship within an extreme individualistic and competitive society? How can we adopt healthier lifestyles if people will continue to be stressed, forced to over-work and to over-consume?

Therefore, the 4 steps described above should be implemented within the general framework of the degrowth theory, thus resulting to be complementary to the 8 R's theorized by Latouche (2007).

What does the "Health and Degrowth" theory add to the current health literature?

Several scientific data show how climate change will strongly affect human health. A recent paper, published in the New England Journal of Medicine, the most important medical review, affirmed that "the complex nature of climate change and its environmental and social manifestations results in diverse risks to human health [...]. Most of the health risks will arise from climatic influences on environmental systems and social conditions that affect food yields, water supplies, the stability of infectious disease patterns, and the integrity of natural and human-built protection against natural disasters (including forest cover, windbreaks, mangroves, vulnerable constructed seawalls, and urban water-drainage systems) and from the adverse health consequences of social disruption, displacement of communities, and conflict situations" (McMichael 2013). "Indirect effects of global climate change threaten the health of hundreds of millions of people" (Myers and Bernstein 2011).

From these data we can draw two important considerations:

1) The current model of development, and its underlying culture, based on unlimited growth and productivity, is not sustainable (Latouche 2007) and, thus, it is incompatible with the protection and promotion of the health of present and

future generations. It does not allow the achievement of sustainability in the field of health, that might be explained, rephrasing the definition provided by the United Nations Brundtland Report (United Nations 1987), as the process to guarantee health of the present generations without compromising health of future generations.

2) If we will not stop climate change, health of humanity will be seriously at risk. Thus, if we think that a degrowth process is the unique chance to really invert climate change (Latouche 2007), we could argue that to maximize health of populations degrowth is necessary.

Nevertheless, even disregarding the evidences described above concerning climate change, we can argue than to achieve health sustainability we need a degrowth process both in health ("health and degrowth" theory) and generally within the socio-economic and cultural system. As a matter of fact, the actual development model (neoliberal capitalism), based on GDP growth, is intrinsically unsustainable from a theoretical point of view for what concerns health. From one side, GDP growth allows more investments in the health care services that augment the health of populations (although causing, meanwhile, some damages as the iatrogenesis presented by Illich), while from the other side growth in this capitalistic model is based on the exploitation of human and natural capital. As a matter of fact, the degrowth theory highlights how this process produces more and more inequity, social and psychological problems and, furthermore, it contributes to damage the natural environment (Latouche 2007). As demonstrated, health depends on socio-economic and environmental determinants for about 60 %, while it depends on health care services for only 25 %. Consequently, it could be argued that a system based on capitalistic unlimited growth is intrinsically unsustainable from the health point of view and that a socio-economic and cultural process of degrowth, both in health and generally speaking, is necessary to guarantee and promote health (fig.6).

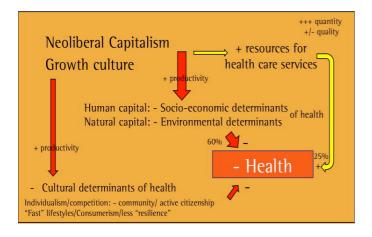


Fig.6 The unsustainability in health field of an economic system based on continuous and unlimited growth.

These concepts are sustained, with an evidence based approach, by some literature that analyse Health and Sustainable development. In this context, of particular concern is the background document "Health in the Context of Sustainable Development" developed for the Oslo WHO Meeting in 2001 (Von Schirnding 2001). In the report, it is described that "human health has been seen as somewhat of a secondary issue - an incidental 'beneficiary' or 'casualty' of the development path", while "the environmental, social and economic dimensions should thus be seen as mutually enforcing, interdependant entities of sustainability. In this context, health provides an important unifying theme in relation to the three pillars of sustainable development [...]. Thus, underlying the concept of sustainable development is the increasing recognition that the goals of sustainable development cannot be achieved when there is a high prevalence

of debilitating illnesses (for example diseases of poverty), and the health of the population cannot be maintained without ecologically sustainable development. In this respect 'ecological' has both social (as in social capital), as well as physical (as in natural capital) dimensions [...]. In some cases the process of development itself is creating conditions where, as a result of economic, political and social upheaval, environmental degradation, and uneven development or increasing inequities, human health suffers. If development occurs in unsustainable ways, population health gains may accompany improving economic conditions in the short term, but the health gains might not be sustainable in the long term [...]. *Thus, if our development path is not conducive to sustained improvements in health, then it is not 'sustainable development'.*"

However in the same report in the introduction sustainable development is defined as "used to refer to achieving an economic system that can continue to grow, at least over the foreseeable future". In the Declaration of Johannesburg (WHO, World Summit on Sustainable Development 2002) it has been furthermore affirmed that "sustainable development [...] requires integrated action towards economic growth and equity, conservation of natural resources and the environment, and social development. Each of these elements is mutually supportive of the others, creating an interconnected sustainable development triad" (fig. 7).

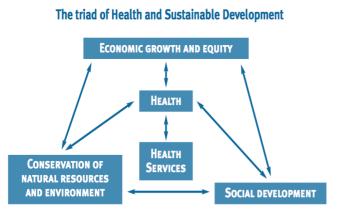


Fig 7. Mutual connections between health and sustainable development factors (WHO, World Summit on Sustainable Development 2002)

Nevertheless, can a system based on continuous economic growth be really sustainable and guarantee health in the long period? Are growth and health, growth and equity, growth and social development, growth and conservation of the environment really mutual supportive? We think they are not (even if sometimes they can be). As Latouche argued in the degrowth theory, sustainable development is a flexible and ambiguous paradigm, thus risky because it does not break clearly with capitalistic accumulation, economism and growth logic (Latouche 2007).

In the health context the dynamic is similar, not only because sustainable development does not allow ecologic sustainability, but in particular because without the cultural and epistemological changes described in the first step of health and degrowth, without breaking the promethean logic of medicine and science and considering differently health,⁷ without a change in the economic, cultural and social structure (the 8 R's), it would be clearly impossible to restructure health and the health system and to promote health through citizens' active participation, in a view of health sustainability.

We, therefore, propose the necessity to go beyond the concept of sustainable development also in the field of health, embracing the "Health and Degrowth" proposal. As a matter of fact, since the Alma Ata Conference there is solid

⁷ For example, as long as people do not accept sufference, do not see illness as a normal process of life, if they want to be always at the best health (consuming more and more goods), and they want illimited cures for everything, no health system could ever respond to these infinite needs and be sustainable for everyone.

scientific evidence that illustrates what has to be done to protect and promote health. However, the objective that scientists have identified, that was "health for all the people of the world by the year 2000", is far to be obtained.

We believe that this is also a consequence of the fact that WHO and scientists described very well the steps to apply for the promotion of health, but they considered development (thus economic growth) as the key to achieve them: "Economic and social development, based on a New International Economic Order, is of basic importance to the fullest attainment of health for all and to the reduction of the gap between the health status of the developing and developed countries. The promotion and protection of the health of the people is essential to sustained economic and social development" (Declaration of Alma Ata 1978).

Nowadays the focus is on sustainable development. Nevertheless, as argued above, there is the need to go beyond this model, embracing and further developing the "Health and Degrowth" paradigm (or other paradigm that go beyond growth ideology). Time for action is limited. It has to be clear that a system based on a logic of continuous economic growth is not compatible with the protection and promotion of health of present and future generations.

Finally, as argued before, the 8 R's that Latouche described for the degrowth theory are necessary to make sustainability possible as well as for allowing a real implementation of the "Health and Degrowth" process in the health field. From the opposite point of view, the changes promoted by the "Health and Degrowth" approach will, in turn, be functional to the diffusion of the degrowth paradigm broadly. As a matter of fact Ivan Illich, at the end of "Medical Nemesis" affirm that "only a political program aimed at the limitation of professional management of health will enable people to recover their powers for health care, and that such a program is integral to a society-wide criticism and restraint of the industrial mode of production" (Illich 1976).

Action: the "Italian Network for Health and Sustainability".

The national group "Health and Degrowth", within the Italian Movement for Happy Degrowth, after having initially theorised basic "Health and Degrowth" principles, organized the "first national conference on health, sustainability and degrowth",⁸ held in October 2013 at the Italian parliament, where the most important Italian associations working in the field of health, degrowth and sustainability,⁹ intervened in order to sensitize the two most important targets for the change: politicians and citizens. Furthermore, the associations, in order to further act in this field, decided to start a process of mutual understanding and dialogue concerning health and sustainability with the aim of developing a network, whose name will probably be "Italian Network for Health and Sustainability". The network might develop synergies, common projects, advocacy, and discussion on sustainability and degrowth in order to develop a common vision (maybe expressed in a declaration) that could strengthen this process.

Conclusion

In conclusion, data and reasoning proposed demonstrate as the current model of development is not compatible with the protection and promotion of health of present and future generations. The theoretical framework provided by sustainable development is a weak and insufficient paradigm for achieving these goals. Thus, it is necessary to question

⁹ Movimento per la Decrescita Felice, Associazione Medici per l'Ambiente - ISDE Italia, Centro Salute Internazionale-

Università di Bologna, People's Health Movement, Medicina democratica, Slow Food Italia,

Osservatorio italiano sulla Salute Globale, Associazione Frantz Fanon, Giù le mani dai bambini, No Grazie pago io,

⁸ "1a Conferenza Nazionale Decrescita, Sostenibilità e Salute: associazioni e politica a confronto". Full video, abstracts and presentations are internet available at: http://decrescitafelice.it/per-saperne-di-piu/seminari-nazionali/decrescita-e-salute/

Associazione per la Medicina Centrata sulla Persona Onlus-Ente Morale, Psichiatria Democratica, Slow medicine, Andria, Siquas (Società Italiana per la Qualità nell'Assistenza Sanitaria), Sism (Segretariato Italiano Studenti in Medicina), Cittadinanza Attiva.

and overturn the current economic system, implementing, both in health and in general, the degrowth theory. In our knowledge, this is the first attempt to elaborate an initial alternative theorization of the application of degrowth in the health field (called "Health and Degrotwh"), that could be a useful tool both in health and in the degrowth field. This new paradigm in the field of sustainability and health requires to deeply re-evaluate and reconceptualise the ideas of health and care, to restructure health services following the new health conceptualization, to promote health and prevention acting on socio-economic, environmental and cultural determinants of health, involving citizens and patients in the health management.

There is a mutual relationship between degrowth and "Health and Degrowth". Degrowth is necessary for health, while the "Health and Degrowth" paradigm is necessary to facilitate the diffusion and implementation of degrowth. Hence, a virtuous circle could be started between these concepts.

As this is the first attempt to delineate and sistematize an alternative and new paradigm in the health field, future studies will be necessary to further analyse and discuss these concepts and to expand the "health and degrowth" theorization.

References

Aillon, J.L., Dal Monte, P., Dal Santo, E. (2012) 'Doctors for Degrowth: From Theory to Practice', Poster presented to the 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity, Venezia, 19-23 September.

Albrecht, G., Freeman, S. and Higginbotham, N. (1998) 'Complexity and Human Health: The Case for a Transdisciplinary Paradigm', *Culture, medicine and psychiatry*, 22.1: 55-92.

Alivia, M., Guadagni, P., Roberti di Sarsina, P. (2011) 'Towards Salutogenesis in the Development of a Personalised and Preventative Healthcare', *EPMA Journal*, 2(4):381-384.

Antonovsky, A. (1987) Unravelling the Mystery of Health: How People Manage Stress and Stay Well, 1st ed., San Francisco: Jossey-Bass.

Barnett, M.L, Linder, J. A. (2013) 'Antibiotic Prescribing to Adults with Sore Throat in the United States, 1997-2010', *JAMA Intern Med.*, Medical News & Perspectives.

Bateson, G., & Bateson, M. C. (1972). Steps to an Ecology of Mind, Vol. 988, New York: Ballantine Books.

Bednarz, D., Beavis, D. (2012) 'Neoliberalism, Degrowth and the Fate of Health Systems', *Health After Oil. The Impacts of Energy Decline on Public Health & Medicine*, September 14, [internet] available at: http://healthafteroil.wordpress.com/2012/09/14/neoliberalism-degrowth-and-the-fate-of-health-systems/# edn17

Bert, G., Gardini, A., Quadrino, S. (2013) *Slow Medicine: Perchè una Medicina Sobria, Rispettosa e Giusta è Possibile*, Milano: Sperling & Kupfer.

Berwick, D.M., Hackbarth, A. (2012) 'Eliminating Waste in US Health Care', JAMA, 307(14):1513-1516

Bobbio, M. (2010), Il Malato Immaginato: I Rischi di una Medicina Senza Limiti, Torino: Einaudi.

Borowy, I. (2013) 'Degrowth and Public Health in Cuba: Lessons From the Past?', *Journal of Cleaner Production*, 38(C): 17–26.

Brody, H., and Lansing E. (1999) 'The Biopsychosocial Model, Patient-Centered Care, and Culturally Sensitive Practice' *Journal of family practice*, 48: 585-587.

Dahlgren, G., Whitehead, M. (1991) *Policies and Strategies to Promote Social Equity in Health*, Stockholm: Institute for Future Studies.

Dal Monte, P. (2012) 'Sustainable Healthcare: Rethinking the Actual Paradigm of "Prometheic" Medicine', paper presented at the workshop Health and Degrowth, 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity, Venezia, 19-23 September.

Dolara, A. (2002) 'Invitation to Slow Medicine', *Italian Heart Journal, Supplement to the Official Journal of the Italian Federation of Cardiology*, 3(1):100-101.

Doran, E., Henry, D. (2008) 'Disease Mongering: Expanding the Boundaries of Treatable Disease', *Intern Med J.*, 38(11):858-61.

Engel, GL. (1977) 'The Need for a New Medical Model: A Challenge for Biomedicine', Science, 196:129-36.

Ferrari, C., Fasano, F., Aillon, J.L., 'Medical Students for Degrowth', paper presented at the workshop Health and Degrowth, 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity, Venezia, 19-23 September.

Gardini, A., Aillon J.L., 'Slow Medicine: a New Health Care Model', paper presented at the workshop Health and Degrowth, 3rd International Conference on Degrowth for Ecological Sustainability and Social Equity, Venezia, 19-23 September.

George, L. K., Larson, D. B., Koenig, H. G., McCullough, M. E. (2000) 'Spirituality and Health: What We Know, What We Need to Know', *Journal of social and clinical psychology*, 19(1), 102-116.

Georgescu-Roegen, N. (1971) The Entropy Law and the Economic Process, Cambridge: Harvard University Press.

Heinsemberg, W. (1930) The Physical Principles of the Quantum Theory, Chicago: University Chicago Press.

Herman, PM., Poindexter, B.L., Witt, C.M., Eisenberg, D.M. (2012) 'Are Complementary Therapies and Integrative Care Cost-Effective? A Systematic Review of Economic Evaluations', *BMJ Open*, 2(5).

Illich, I. (1976) Medical Nemesis: The Expropriation of Health, New York: Pantheon Books (Random House).

Kuehn, B. M. (2013) 'Excessive Antibiotic Prescribing for Sore Throat and Acute Bronchitis Remains Common', *JAMA*, 310(20):2135-2136.

Latouche, S. (2009) Farewell to Growth. Cambridge: Polity Press.

Latouche, S. (2007) La Scommessa della Decrescita, Milano: Serie bianca Feltrinelli.

McMichael, A. J. (2013) 'Globalization, Climate Change, and Human Health', N Engl J Med, 368:1335-43.

Marmot, M., Wilkinson, R. (2003) Social determinants of Health: The Solid Facts, Geneva: World Health Organization.

Miles, A. (2009) 'On a Medicine of the Whole Person: Away From Scientistic Reductionism and Towards the Embrace of the Complex in Clinical Practice', *Journal of Evaluation in Clinical Practice* 15.6: 941-949.

Mikkonen, J., and Raphael, D. (2010) 'Social Determinants of Health: The Canadian facts', York University, School of Health Policy and Management, [internet] available at: http://www.thecanadianfacts.org/The_Canadian_Facts.pdf

Moynihan, R., Heath, I., Henry, D., 'Selling Sickness: The Pharmaceutical Industry and Disease Mongering', *BMJ*, 324(7342):886-91.

Myers, S. S. and Bernstein, A. (2011) 'The Coming Health Crisis: Indirect Effects of Global Climate Change', *F1000 Biol Rep*, 3(1):3.

Ovretveit, J. (2009) 'Does Improving Quality Save Money? A Review of Evidence of Which Improvements to Quality Reduce Costs to Health Service Providers', *The Health Foundation*, [internet] available at: http://www.health.org.uk/media_manager/public/75/publications_pdfs/Does%20improving%20quality%20save%20mo ney.pdf

Pallante, M. (2009) La Decrescita Felice: La Qualità della Vita Non Dipende dal Pil, Roma: Edizioni per la Decrescita Felice.

Pallante, M. (2011) Meno e Meglio: Decrescere per Progredire, Mondadori Bruno.

Plsek, P. E., and Greenhalgh, T. (2001) 'The Challenge of Complexity in Health Care'. BMJ, 323(7313), 625-628.

Redberg, R. F. (2014) 'Choosing Wisely, and Soon', JAMA Intern Med., 174(1):140.

Roberti di Sarsina, P. (2007) 'The Social Demand for a Medicine Focused on the Person: The Contribution of CAM to Healthcare and Healthgenesis', *Evid Based Complement Alternat Med*, 4(S1):45–51.

Roberti di Sarsina, P., Iseppato, I. (2010) 'Person-Centred Medicine: Towards a Definition', *Forschende Komplementärmedizin*, 17(5):277-278.

Roberti di Sarsina, P., Alivia, M., Guadagni, P. (2013) 'Widening the Paradigm in Medicine and Health: The Memorandum of Understanding between The European Association for Predictive, Preventive and Personalised Medicine EPMA and the Italian Charity «Association for Person Centred Medicine»', *Journal of Alternative & Integrative Medicine*, (2)1:1:e107.

Suls, J. and Rothman, A. (2004) 'Evolution of the Biopsychosocial Model: Prospects and Challenges for Health Psychology'. *Health Psychology*, 23(2), 119.

Sternon, J., Glupczynski, Y. (1999) 'Overprescribing of Antibiotics Outside the Hospital', Rev Med Brux, 20(1):43-7.

Stewart, M. (2003) *Patient-centered Medicine: Transforming the Clinical Method*, Abingdon, UK: Radcliffe Publishing.

The Standing Senate Committee on Social Affairs, Science and Technology (2001), 'The Health of Canadians – The Federal Role Volume One – The Story So Far', Interim Report on the state of health care system in Canada [internet] available at: http://www.parl.gc.ca/Content/SEN/Committee/371/pdf/interim-soci-e.pdf

United Nations (1987) 'Report of the World Commission on Environment and Development: Our Common Future', known also as 'Brundtland Report', [internet] available at: http://www.un-documents.net/our-common-future.pdf

Von Schirnding, Y. and Mulholland, C. (2001) 'Health in the Context of Sustainable Development', Background Document Prepared for WHO Meeting "Making Health Central to Sustainable Development: Planning the Health Agenda for the World Summit on Sustainable Development", hosted by the Government of Norway Oslo, Norway, 29 November-1 December.

Wise, R., Hart, T., Cars, O., Streulens, M., Helmuth, R., Huovinen, P. et al. (1998) 'Antimicrobial Resistance Is a Major Threat to Public Health', *Br Med J*, 317: 609–610.

World Health Organization (1946), 'Preamble to the Constitution of the World Health Organization' as adopted by the International Health Conference, New York, 19 June - 22 July. Signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p. 100) and entered into force on 7 April 1948. The definition has not been amended since 1948.

World Health Organization (1978) 'Declaration of Alma-Ata', International Conference on Primary Health Care, Alma-Ata, USSR, 6–12 September, [internet] available at: http://www.who.int/hpr/archive/ docs/almaata.html.

World Health Organization (1986) 'The Ottawa Charter for Health Promotion', First International Conference on Health Promotion, Ottawa, [internet] available at: http://www.who.int/healthpromotion/conferences/previous/ottawa/en/

World Health Organization (2002) 'Health and Sustainable Development', Summary Report, Meeting of Senior Officials and Ministers of Health, Johannesburg, 19-22 January, [internet] available at: http://www.who.int/mediacentre/events/HSD_Plaq_02.7_def1.pdf

World Health Organization (2002) 'Johannesburg Declaration on Health and Sustainable Development', Meeting of Senior Officials and Ministers of Health, Johannesburg, 19 – 22 January, [internet] available at: http://www.who.int/mediacentre/events/HSD_Plaq_02.8_def1.pdf

World Health Organization (2002) 'Traditional Medicine Strategy 2002–2005', Geneva, [internet] available at: http://whqlibdoc.who.int/hq/2002/who_edm_trm_2002.1.pdf

World Health Organization (2008), 'The World Health Report 2008: Primary Health Care (Now More Than Ever)', [internet] available at: http://www.who.int/whr/2008/en/index.html

World Health Organization (2008) 'Commission on the Social Determinants of Health, Closing the Gap in a Generation: Health Equity through Action on the Social Determinants of Health', Geneva, [internet] available at: http://www.who.int/social_determinants/thecommission/finalreport/en/

World Health Organization (2014) 'WHO traditional medicine strategy: 2014-2023', [internet] available at: http://apps.who.int/iris/bitstream/10665/92455/1/9789241506090_eng.pdf