The First 1,000 Days 2.0: Matrix for Our Lifespan

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The first 1,000 days of human development including preconception and pregnancy phases account for 70% of individual future life.

- **Mother and infant effective point to intervene**
- **Child/adolescent effective point to intervene**
- **Adult: screening may be too late to reduce risk**
- **Affected adult: interventions have limited effect**

**Future Parents Prepare For Conception**

**Life course**

**Risk**

**Plasticity**

Detrimental effects of lifestyle challenges/increasing mismatch

Preconception
Preconception
Fetal life
Infancy and childhood
Adult life
Adolescence
Older ages

Cumulative incidence
Preventable risk

Chronic Disease Prevention: a life course approach

FIRST 1000 DAYS
PRIMI 1000 GIORNI
Lifestyle-Caused Inflammation as Driver of NCDs

Health stressors
- Hormonal factors
- Behavioral factors
- Chemical stressors
- Non-chemical stressors

Modern lifestyle
- Diets
- Microbial patterns
- Pollutants
- Physical excercise

Inflammation and altered immune functions

Multi-System Effect
- Tissue Damage, Oxidative Stress and Tissue Repair

Increased NCD Risk
Inflammation + ageing = Inflammageing
Definition of Wellness

Wellness is the optimal state of health of individuals and groups. There are two focal concerns: the realisation of the fullest potential of an individual physically, psychologically, socially, spiritually and economically and the fulfillment of one’s role expectations in the family, community, place of worship, workplace and other settings.

WHO – World Health Organization
Wellness as a prescription to protect tissues and resolve chronic inflammation

Tissue damage

Excessive response

Prevention
Balanced response through Wellness activation

Onset phase

Wellness Prescription

Wellness Treatment
Wellness Resolution

Nonresolving/chronic inflammation

Resolution phase

Trends in Pharmacological Sciences
Illness-Wellness Continuum

“Wellness educates for healthy lifestyles and promotes prevention.”

Neutral point
(no discernable illness or wellness)

Disability  Symptoms  Signs
Treatment Paradigm

Wellness paradigm

52% of world population

5% of world population

High-level Wellness

Awareness  Education  Growth
Precision Medicine

Precision Medicine is a Systems approach that will possibly be able to convey a more precise classification of disease. It’s a measure of how molecular diagnostics allows physicians to unambiguously diagnose the cause of a disease without having to rely on intuition.
Precision Wellness

Comprehensive integration and personalization of physical, meditational, intellectual, musical and other activities to increase self awareness and connection of the inside with the outside.
Marrying

Precision Medicine

with

Precision Wellness

= Precision Health

It is the Integration of Precision Medicine and Precision Wellness to Improve the Health of an Individual.
Network Medicine: A System of Integrated Complex Networks
Network Wellness

The anti-inflammatory systemic effect of the wellness network
In Italy, we’ve been doing that since quite some time...
Dimension of Health and Wellness

Health and Wellness are a Multi-dimensional Entangled Universe

- Spiritual
- Emotional-
  mental
- Physical
- Social
- Intellectual
Future Sustainability of the Healthcare System

- Self-Care
- Early Prevention & Intervention
- Living Well
- Empowerment and Support

Hospital Care
Acute and Specialist Rehab
First 1000 days prevention of chronic diseases continues throughout the lifespan

Preconception

Fetal life

Infancy and childhood

Adolescence

Adult life

 Older ages

Preventable risk

Cumulative incidence
Key Take-aways

• Current society urgently needs to establish a comprehensive and integrated systems approach to tackle the burden of chronic diseases.

• The UN General Assembly unanimously adopted a political declaration mobilizing accelerated effort to address non-communicable diseases (NCDs) on September 27, 2018:

"Time to Deliver: Accelerating our response to address NCDs for the health and well-being of present and future generations".
Key Take-aways

The First 1000 days: A Matrix for our Lifespan

• Starting from **Preconception to the First 1000 days**, and continuing through adolescence to adulthood (**First 8000 days**) healthy lifestyles and personalized wellness approach may prevent painful and expensive cures and provide the optimal conditions for health and wellbeing throughout the lifespan.

• The concept of **Network Wellness** is new and must be integrated with the concept of Network Medicine.

• **Precision Wellness** represents the most cost-effective model to safeguard public health as well as a great ethical business.

Precision Wellness is the Vaccine to Chronic Diseases
Thank you!

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