



RAMAIAH
Indic Specialty Ayurveda

Ayurveda - Indian system of medicine

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Introduction

- Indian knowledge systems (IKS) – foundational unity despite diverse nature
- Contiguous, interconnected and epistemologically common identity
- Same thread runs through gamut of activities including medicine, farming, cooking, grammar, dance, arts etc.
- Currently, IKS are in a state of transition owing to external influence
- Unfortunately distorted promotion and popularization of IKS that can be detrimental to civilization in the long run



Medical pluralism

- Health behavior is a type of social behavior mainly influenced by the various socio-cultural issues.
- Understanding a disease/illness is not a medical subject rather it is mainly reliant on the common information of the concerned community.
- This has led to prevalence of more than one system of medicine existing
- **Medical Pluralism is an adaptation of more than one medical system or simultaneous integration of orthodox medicine with complementary and alternative medicine (CAM)**



Traditional medicine

- **WHO** defines **traditional medicine** is the **sum total of the knowledge, skills, and practices based on the theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness**
- Health seeking behaviour has changed worldwide with larger numbers now leaning towards some form of traditional medicine, especially in areas like NCDs where modern medicine is not providing ample relief

Different traditional medical systems

- Traditional medicines include **Ayurveda**, Siddha medicine, Unani, ancient Iranian medicine, Iranian (Persian), Islamic medicine, traditional Chinese medicine, Kampo (drawn largely from TCM, in Japan), traditional Korean medicine, acupuncture, Muti, Ifá, and traditional African medicine and many many more newer practices
- Very few of such practices are **complete knowledge systems**
- **Ayurveda** – a comprehensive system, with holistic approach; attends to body, mind and spirit



Advantage of Ayurveda

A **functional framework** that can accommodate any medical condition one may encounter.

A **practical inventory** of physical universe and their effect on the living system which, when understood makes everything around us a potential medicine



*Vikaro nama akushalo na
jihriyat kadaachana*

Personalised medicine

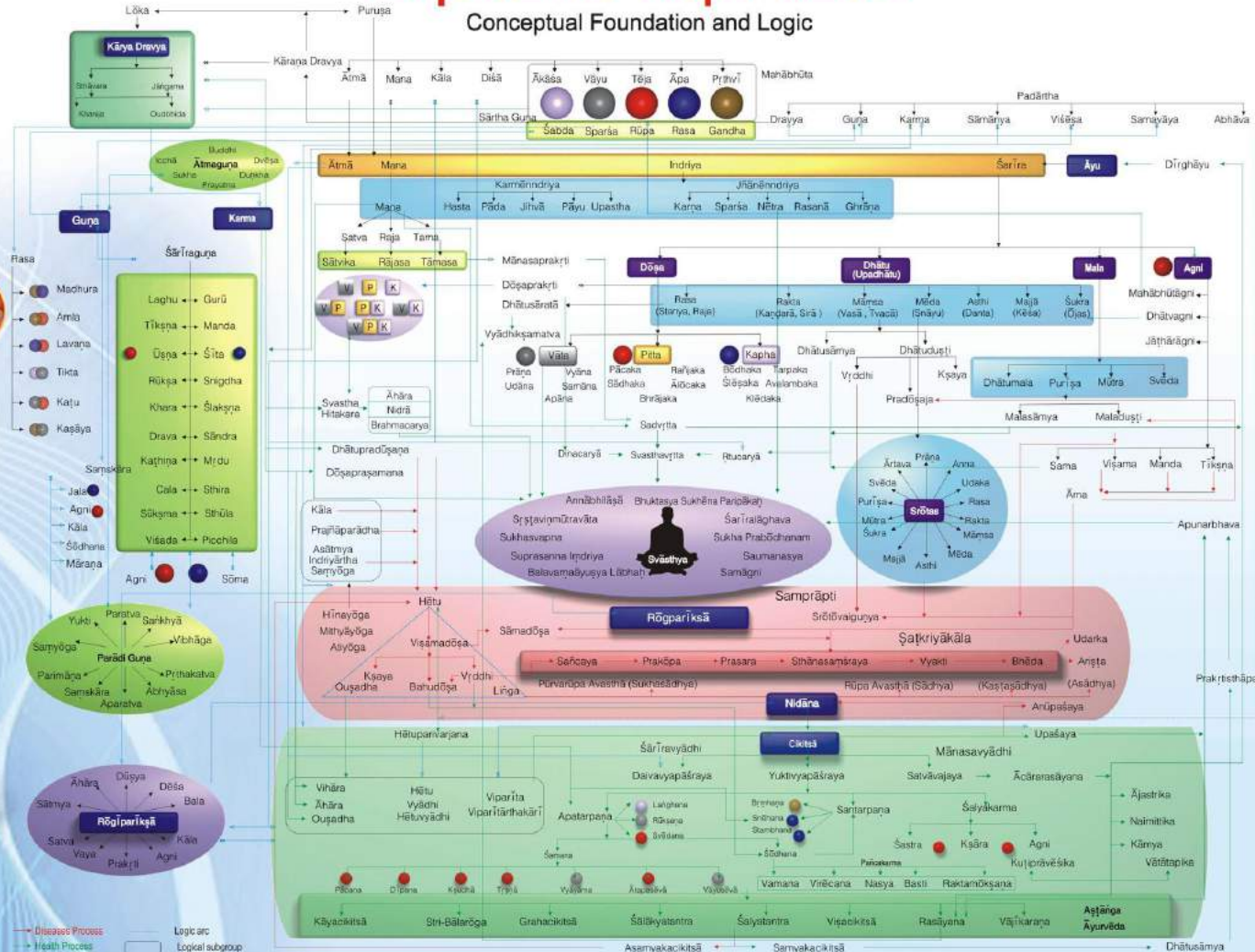
- Today's medicine "ONE DRUG FITS ALL" approach
- Ayurveda, traditional Chinese medicine and Korean medicine, all have well defined systems of constitutional types used in prescribing medicine – bear resemblance to personalized medicine

"It's far more important to know what person has the disease than what disease the person has"- Hippocrates

"Those who treat merely with formulations and not aware of the implication of Desa (the habitat in which the patient lives), Kala (the time of disease manifestation) Prakriti (psycho somatic constitution), etc. of the particular person will be committing mistakes in treatment" - Charaka

Systems Āyurvēda®

Conceptual Foundation and Logic



Created by
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About this Poster

The 'Systems Āyurvēda' graphic relation develops schema of Āyurvēda knowledge base. Comprehensive view of concepts and logic is provided through this diagram. In addition to logical, sequential base flow, Āyurvēda also adopts multi-dimensional, and to-many and many-to-many modes of relations. We hope the forthcoming poster series on 'Systems Āyurvēda' will further provide an in-depth conceptual exploration of logic and inter-relationships of Āyurvēda.

'Systems Āyurvēda' is an entity-relationship model based on Systems Biology Database format (DB4R) format. The major nodes, interaction, properties, dynamic flows, feedback loops, entities and their attributes in health and disease. The foundation and logic of Āyurvēda is mainly based on Sāra and Vāyava properties. According to this, every matter (Prakṛti) is composed of ten principal elements (Mahābhūta). The functional parts of matter are measured in the form of mass and motion; balance could be assessed by simple logic and method. Main aim of Āyurvēda is to promote health, longevity and disease-free life. This is achieved through maintenance of Dhātu, Dhātva, and Āyū. Āyurvēda concept involving proper lifestyle, medicine, herbs, diet, and exercise, etc. This is an active factor dependent on properties and activities related to the context. The processing (Bhāvanā) involves augmentation of health promoting properties and reduction of disease. The disease process arises from causal factors (Mūla) and any disturbance in system (Kaṭu). The Srotra is a process through several steps (Srotrāṅga) and maintains its class. The holistic approach of Āyurvēda management aims at maintaining health through management, treatment, medicines, including counseling, lifestyle, diet, and exercise. Every aspect of 'Systems Āyurvēda' logic is based on inter-relationships and the specific role in maintenance of health and/or disease. The 'logic to cure' model of Āyurvēda philosophy is important for better understanding of comprehensive account. The overview data consisting of over 300 relations describing logic flow and concepts of Āyurvēda have been organized using DB4R approach for process, entity relationships and activities.

Narain N.L. et al. Systems Biology Database Model: Ayurveda. Bioinformatics, 2008, 24, 1781-1811. We gratefully acknowledge suggestions and inputs from Dr. Shri Rakesh D. Venkatesh Dr. Anand Sharma, Dr. Suresh Srinivas Dr. Phiroze Durrani and Dr. Sankar Chakrabarti.

Legends:

- Sāra
- Guṇa
- Svāsthya
- Samprāpti
- Śaṭkriyākāla
- Cikitsā
- Ājārga Āyurvēda



— Disease Process
— Health Process
— Subtypes
— Concepts to applications
 Logical subgroup
 Conceptual inputs

What can Ayurveda offer

- Identification of physiology prior to pathology
- Tenfold examination (Dashavidha pariksha) that helps isolate components of the persons' physiology and pathology – Planning of treatment based on the outcome of this measure
- Aids understanding of
 - Physiological attributes – age, build, constitution, tissue health
 - Physiological processes – digestion and metabolism
 - Habits – food, lifestyle
 - Environmental factors that can influence life – habitat, climate



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*Vikaro nama akushalo na jil
kadaachana*

Indicative correlates of dosha theory with biomedical science

Vata

Movement

Governs nervous and musculoskeletal systems

Signaling pathways regulating cell growth, differentiation, and cell death

Pitta

Transformation

Actions of enzymes, growth factors, hormones

Processes such as digestion, metabolism, energy production

Kapha

Anabolism

Maintains body mass, shape, and flexibility

Biosynthesis of macromolecule. coordination of gene and protein function

Elemental tissues (dhatu) – factors affected in disease pathogenesis

- Rasa
- Fluid component (intra-extra cellular)

Nourishes



- Rakta
- Intravascular component

Gives life



- Mamsa
- Muscular tissue

Covers



- Meda
- Adipose tissue

Lubricates



- Asthi
- Structural component (skeletal)

Supports



- Majja
- Intraosseous material

Completes

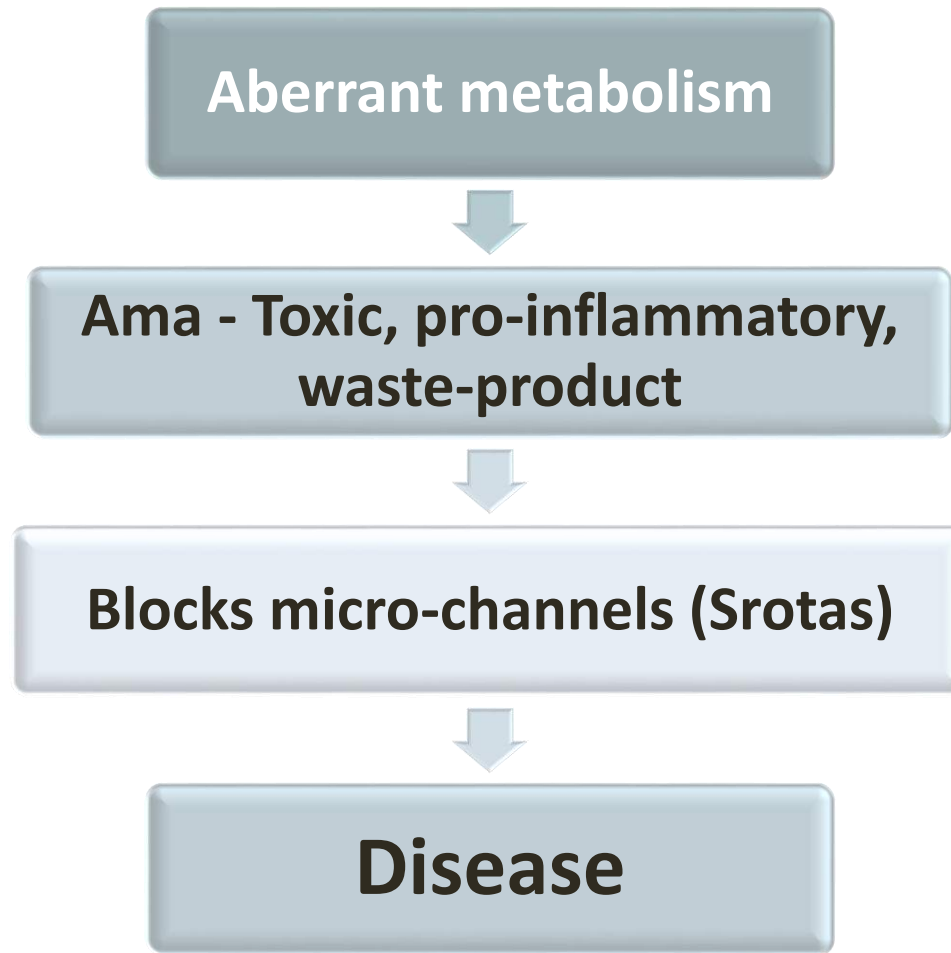


- Shukra
- Reproductive material

Reproduces

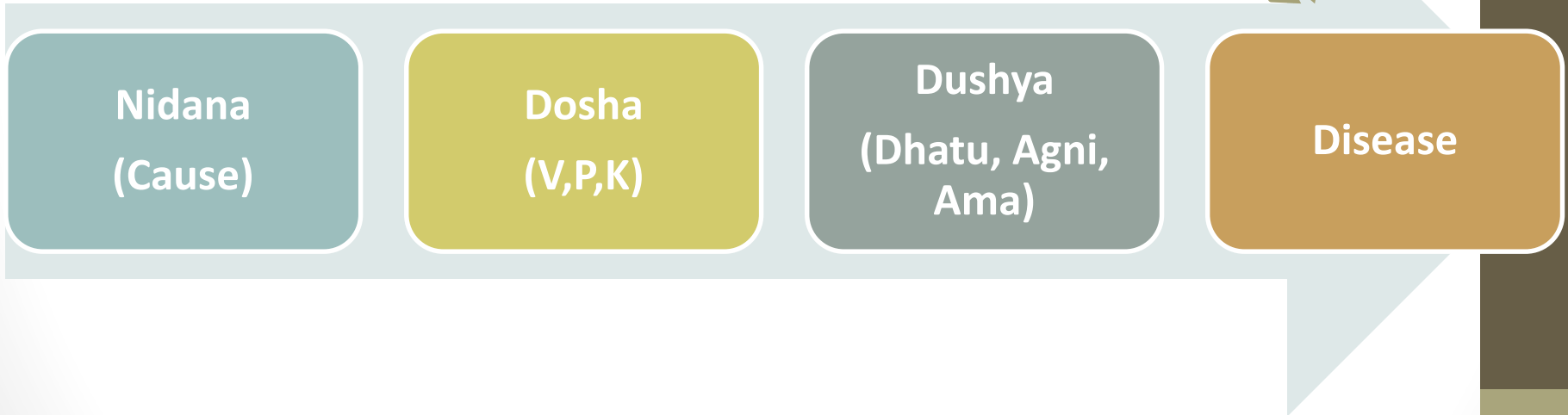
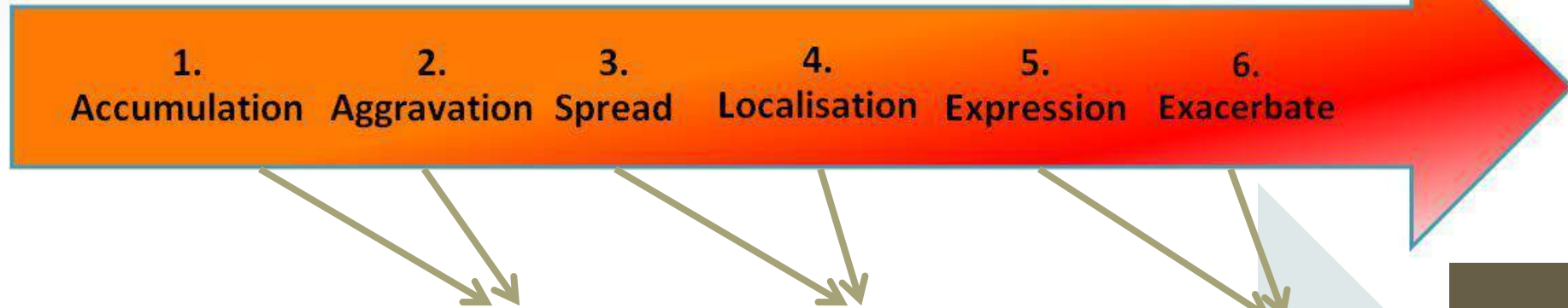


Cause of disease in ayurveda (AMA)



Ayurveda theory of pathogenesis

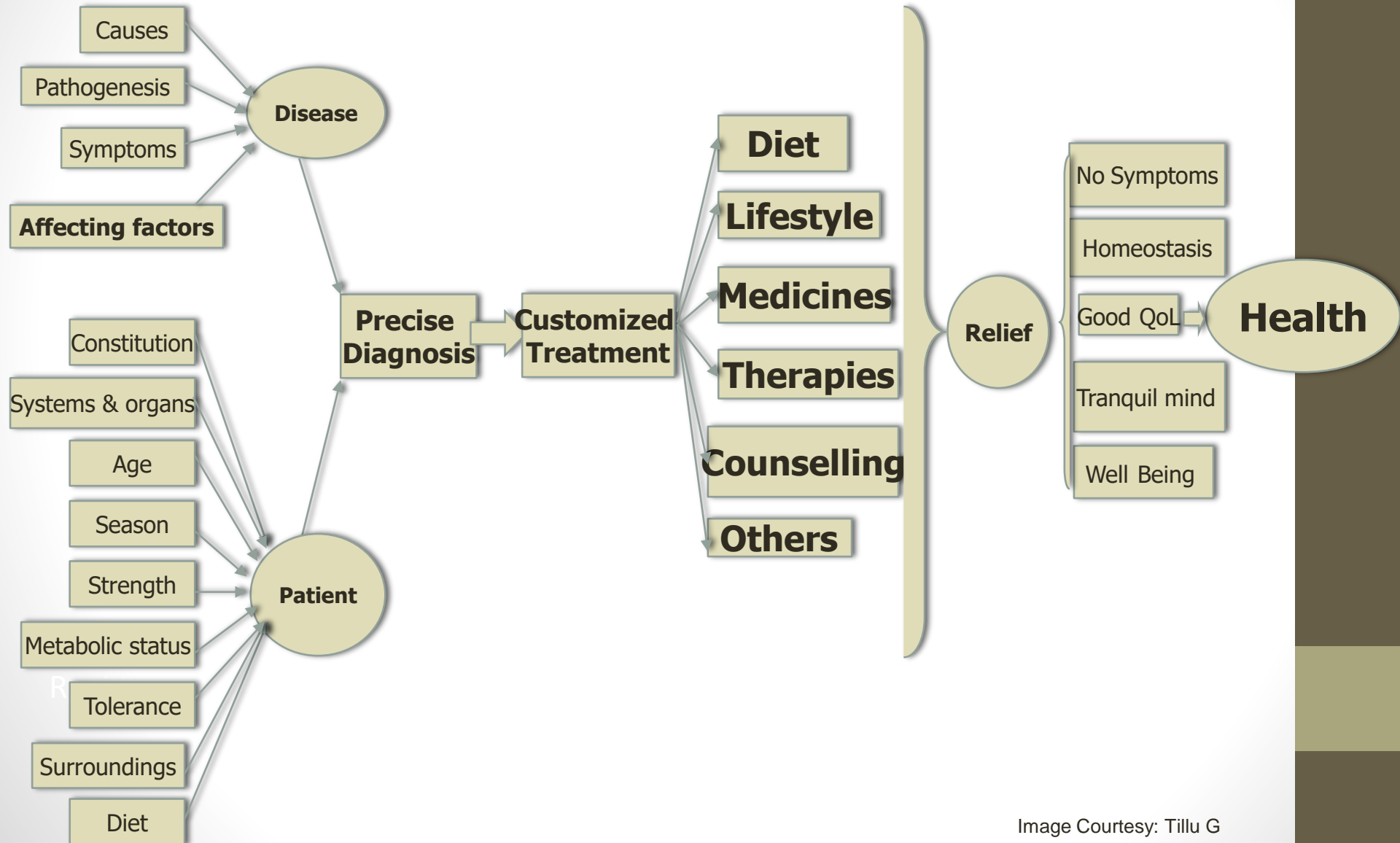
Six stages of progression



Factors involved in disease production

Therapeutics is designed to correct Nidana, Dosha and Dushya

Variables in Ayurveda disease management



Treatment focus in Ayurveda

- Host factors rather than disease factors
- Whole system rather than target tissue
- Multidrug/therapy rather than single molecule
- Preventive and promotive in addition to curative



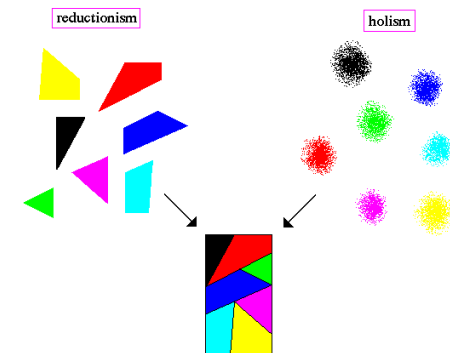


Inherent strengths of Ayurveda

1. **Customised intervention** that varies according to individual constitutional frame work (*prakriti*) and the stage & phase of disease.
2. **Multi-component intervention** involving drug, diet, lifestyle, *panchakarma (detox)* and yoga.
3. A systemic cleansing of body (*shodhana chikitsa*) using techniques of **Panchakarma** that is unique to Ayurveda
4. A treatment approach that has **homeostasis or restoration of balance as its end point**. In this approach, stress is laid on two things:
 - a. **Apunarbhavatva: Achieving a stable state of homeostasis that does not** relapse to the prior diseased stage (non-recurring).
 - b. **Yonyamanyamudeerayet:** Achieving homeostasis without causing any disturbance to any other systems (without side-effects).

Challenges of traditional medicine

- Major threat is
 - trend to negate philosophical moorings
 - Discard their interconnectedness
 - Promote them as fragmented systems
- Concept of holism, ethics in application and responsibility to the philosophy is diluted and disregarded
- Need is
 - Explore and adopt ethical modes to adapt to changing times



Opportunities

- Ayurveda incorporates a remarkably broad definition of medicinal plants and considers 'all' plant entities to be potential source of medicinal substances
 - “-----जगत्येवमनौषधम्।
न किञ्चिद्विद्यते द्रव्यं वशान्नानार्थयोगयोः ॥१०॥”
- Adding to the dwindling repository of Ayurveda pharmacopoeia will be a significant contribution for the future generations

“The science of life shall never attain finality. Therefore, humility and relentless industry should characterize your endeavor and approach to knowledge. The entire world consists of teachers for the wise. Knowledge conducive to health, longevity, fame, and excellence, coming even from an unfamiliar source, should be received, assimilated and utilized with earnestness.” Acharya Charaka

Thank you



