Twelve Commandments to Prevent Tsunami of Cardiometabolic Syndrome in India by 2025

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For all my physician friends I will like to stress 12 important points with the emphasis on prevention of tsunami of cardio metabolic diseases if we do not want India to be the world capital of Diabetes in 2025.

Prevention must start today and I recommend that every Indian should have the following tests as routine beginning quite early in life at least at age of 18.

1. When you go home measure your abdominal girth. Males more than 90 cm and Females more than 80 cm you have a marker for metabolic syndrome and therefore your exercise should start today that is a first simple thing.

2. Each one of you have a pro-insulin to insulin ratio measured right from the beginning, a ratio more than 18% is a marker of metabolic syndrome.

3. You must have your adiponectin measurement less than 7 milliunits is a very form marker of metabolic syndrome. Low adiponectin causes 60-70% reduction of UCP2 gene expression facilitating adipogenesis.

4. You should have your Urine for Microalbuminuria which is a part of metabolic syndrome.

5. All of you must have your Haemoglobin A1C more than 6.5% marks the beginning of metabolic syndrome.

6. Diabetes is an Inflammatory* state so hsCRP should be measured as a routine more than 2 is a measurable marker of metabolic syndrome.

7. Vitamin D Deficiency-.Almost 200 genes in human body are activated by Vitamin D. Vitamin D has receptors on all organs including Heart and Blood Vessels and you will be surprised that most of you sitting in this audience are deficient in Vitamin D. At Jaslok hospital, I was in the basement like a parda-lady from Bhendibazar, has no exposure to sunlight so, when I had a fracture my vitamin D was less than 5 and I have done routine Vitamin D of all the medical and nursing staff and all were found deficient in Vitamin D. So make sure that you maintain your vitamin D at least 30 units every day or take vitamin supplement. And I recommend 11 o’clock tea break at every hospital should be in sunlight on a terrace. Doctors, Nurses and everybody. A similar exposure can be arranged for school children on daily basis.

I am making some more Practical Suggestions.

8. Atherosclerosis is a pro Inflammatory state. All our cell membranes including the neurons should have EPADHA Eicosa Pentanoic Acid and Decosa Hexanoic acid at least 6% to 8%. Our cell membranes including the Neurons contain pro-Inflammatory as well as Anti inflammatory cytokines. RBC EPA DHA represents cell membrane content of all cells. Which can be routinely measured and most of us are having EPA DHA content less than 4%.

So we make more pro-inflammatory cytokines and less of anti inflammatory cytokines, Lipoxins, Resolvins, protectins including Neuroprotectins, Marecin.

Even the latest edition of Harrison’s Text book of Medicines does not mention anti inflammatory cytokines. The Eskimos consume fish oil and they live for 100 years because of their rich Omega 3 content. I recommend cows ghee: 10 grams per day will give you 1.5 gram Omega 3. Dara singh our famous iconic wrestler, who lived upto the age of 88 took 250 grams of cows ghee everyday, I am suggesting only 10 to 20 grams.

And last what I suggest is to utilise the tradional experiential wisdom of Ayurveda (science of life) whose primary aim is promotion of positive health and prevention of illness Swasthvrutta for the body and Sadvrutta for the mind.
Ayurveda emphasises breast feeding (since breast milk has maximum omega 6:3 ration of 2:1 hence today’s paediatricians recommend extension of breast feeding from the usual six months to 12 or even 18 months if feasible.

9. India has a unique tradition of ancient medicines and there are 3 Indian drugs which are unique. Pro-insulin to insulin ratio is more than 18% in diabetics.

Vijaysar, an ayurvedic drug converts pro-insulin to insulin so, I urge Diabetologists in India to conduct clinical trial of baseline, Pro-insulin to insulin ratio and after 3 months of Vijaysar.

10. Guggule (Comiphora Mukul) is described in Ayurveda as “Medohar” Gugglesterone it’s active ingredient is an anti obesity drug it blocks the PPR gamma Farscenoid receptors (FXR) and prevents adipogenesis.

A clinical trial can be undertaken to prove Guggglesteron is an anti obesity drug for everybody whose abdominal girth is more than 90 cm.

11. Another suggestion is about Osmotin, (A plant analogue of Adiponectin). In 2013 in a Dubai conference, I recommended that osmotin extracted from Methi seeds and Methi Leaves can be used as nutritional supplements. Karela Juice also contains osmotin in lesser concentration.

When I gave this talk in Dubai, The Chairman said “Dr. Lele, Patent your idea” but as I was not interested in the patent but wanted to publish and popularise the concept so that many can use it.

Ayurved describes that satvik ahar enabled rishis and Munis to live for 100 years. Satvik ahar contains 400 gms of fruits and vegetables which represents low calories (1300), soluble fiber, vitamins and minerals. I have suggested that the part of benefits of satvik ahar are due to the osmotin contents, which remains stable in the gastrointestinal tract.

12. My last suggestion pertains to glucagon suppression as a primary modality for both type one and type 2 Diabetes. If Glucagon was discovered earlier than Insulin, Diabetes should be defined as a state of Hyper-Glucagonememia. Glucagon suppressors only recently become available as Gliptins. But in Ayurveda, there is a drug called Triphala, (Aamliaki, Haritki, Bethki) which suppress CCKA and CCK B receptors and block glucagon release by the Alfa cells of Pancreatic islets. This C.C.K. receptors suppression brings down Glucagon.

So again a study which can be easily done to measure the effect of Triphala before and after 3 months and how it can bring down the Glucagon levels.

Our thinking and approach is heavily dependent on preaching from the west which is classically described as “Para pratyaneya Buddhi”.

My approach is out of box disruptive thinking, which will surely prevent the disaster of cardio metabolic tsunami in our country in near future.

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