

EX AMORE CONSULENDI

December 2017



IN THIS ISSUE

*Finalisation of laboratory floor
plans and instrumentation on
9th December 2017*

*Finalisation of clinical areas
on 10th December 2017*

Rehabilitation services

Website

Common interest articles

News and Events

Project Summary

“You don’t get into something to test the waters, you go into things to make waves”



Best wishes for the New Year 2018.

The Naruvians have been at their active best in the last month. It is so gratifying to see the whole hearted involvement of all the Naruvians towards building a near perfect hospital. Everybody has taken it upon themselves to make NARUVI HOSPITAL a one-of-a-kind hospital that they all want to be proud of. Meeting after meeting, discussion after discussion, email after email, arguments bordering on war, have finally turned the hospital plan into an extremely space and time efficient design. I have no words to express my gratitude to all the Naruvians for the sincere efforts they have taken. Suffice it to say, ‘Thank you dear Naruvians’! I am more than satisfied and supremely grateful to all the Naruvians for their hard and unrelenting labour for making a feeble dream years ago, a stark reality, and one that I am proud to be a part of. All I wish and hope for is good health and happiness for all the Naruvians, for everyone involved in the building of the hospital, and for myself, that we would all together be able to live up to our own expectations of setting up and opening a world class hospital in ‘good old Vellore’ and be of service to the people around, and the country at large.

Jai Hind.

Long live Naruvi.

G V Sampath

Finalisation of laboratory floor plans and instrumentation on 9th December 2017

A high level meeting of laboratory medicine experts from all the different disciplines - Bacteriology, Virology, Histopathology, Immunology & Molecular Biology were present at the meeting which was attended by the architects. All the nuances of setting up a world class lab was discussed at the meeting, to be integrated into the laboratory area. JCI and NABL norms were kept strictly in sight so as not to have to change things later.



Finalisation of clinical areas on 10th December 2017

A similar exercise was run the next day.

We had the Senior Gastroenterologist giving his highly thought out inputs on the endoscopy areas.

There was a very serious discussion on the emerging importance of 'day care surgery'. The senior Urologist and Senior Orthopaedician were strongly in favour of a sizeable day care area with appropriate numbers of recovery beds/lounge chairs. Several changes were made in the existing plan to incorporate this.

There were several significant suggestions from the senior anaesthesiologist regarding induction areas, storage space etc.

This was also made possible.

A few changes were made in terms of power supply and oxygen generators to account for the worst natural disasters, such that 'life saving' areas would not be starved of either of these under any circumstances.

Many more very crucial suggestions were brought to the table. The architects were patient and good enough to incorporate all of them.

It was a very unique experience in all - where the highest level of clinicians were involved in the design layout of the building, so that 'retro-fitting' would be avoided as best as possible.

The minutes of the meeting was like a 'recipe book' to build a world class hospital - almost a DIY manual minus the kit!

Rehabilitation services



Discussions are underway to set up a highly advanced rehabilitation unit which would incorporate all the services, including mental rehabilitation. Physiotherapy, Occupational therapy, Speech and Language therapy, Swallow therapy and Robotics are all going to be part of the services provided. This facility would be on the top most floor of the hospital building overlooking the river bed - a most refreshing and bright way to have rehabilitation therapy.

It was a very unique experience in all - where the highest level of clinicians were involved in the design layout of the building, so that 'retro-fitting' would be avoided as best as possible.

News and Events

Dr. Paul T Henry has taken over as full time Executive Director of The Naruvi Group.

The Naruvi Group of Hospitals is moving into its Corporate Office in Chennai by the 15th of January. The office is located on TTK road, a very prime location.

Public health seminar

"ROLE OF A 21st CENTURY HI-TECH HOSPITAL IN PUBLIC HEALTH IN INDIA".

The seminar is being held on the 20th of January 2018. We have great luminaries addressing us. We are also launching a public health fellowship in honour of our Chairman's mother, Late Mrs. Rajeshwari. Prof. Jacob John, one of the doyens of Virology research and vaccine implementation in India is being presented the 'First Rajeshwari Memorial Award for medical research'.

Project Summary

We have made significant progress at our work site. The foundation work has started and is going full swing.

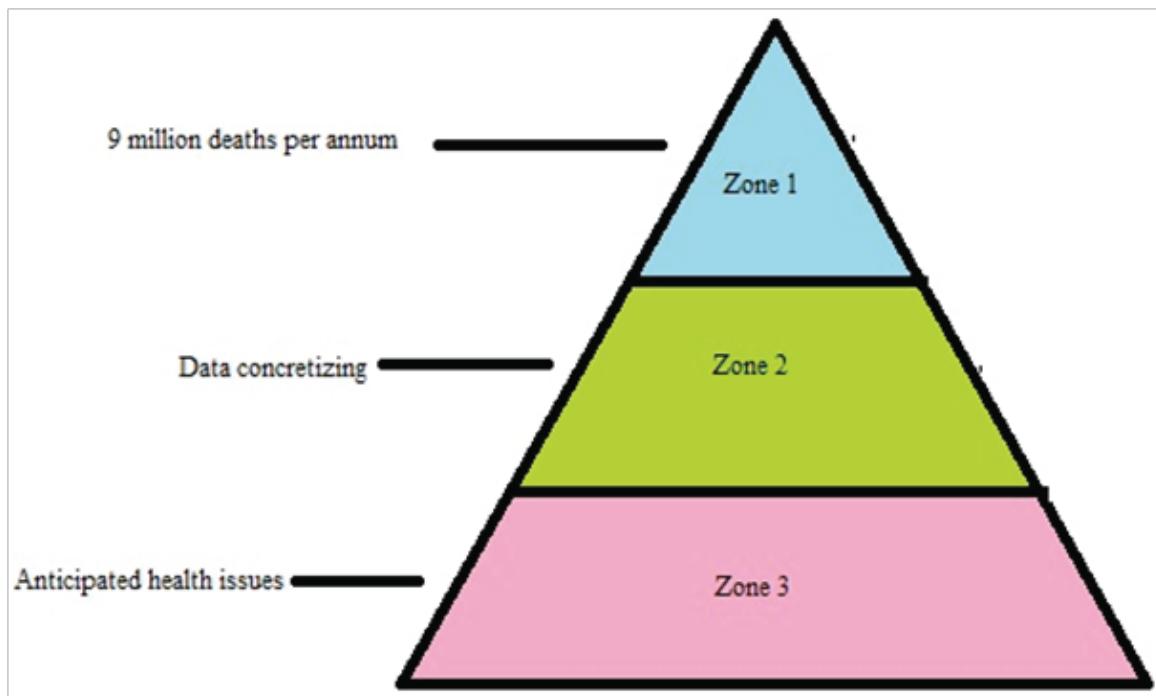


Website

The website is being designed. We are creating a website that will be exciting, interactive and a unique experience to visit. We should have it up and going by the middle of February.

Common interest articles

Air pollution and its effect on human health: a cautionary note



Zone 1: Well characterised health effects of pollutants (pulmonary disease)

Zone 2: Emerging, but still unquantified health effects of known pollutants (diabetes, CNS disorders and birth abnormalities).

Zone 3: Inadequately characterised health effects of emerging pollutants (data emerging)

The pollutome is defined as the totality of all forms of pollution that have the potential to harm human health. The pollutome can be viewed as a fully contained (nested) subset of the exposome. The exposome can be defined as the measure of all the exposures of an individual in one lifetime, and how these exposures relate to health. This model includes pollutant exposures during gestation, infancy, childhood, adolescence, adult life (including occupational exposures) and old age. Zone 2 and 3 may have more number of human fatalities, and are hence placed at the bottom of the pyramid.

Pollution is the largest environmental cause of disease and premature death in the world today. Diseases caused by pollution were responsible for an estimated 9 million premature deaths in 2015.

This constitutes 16% of all deaths worldwide - three times more than from AIDS, tuberculosis, and malaria put together, and 15 times more than from wars and terrorism. Nearly 92% of pollution-related deaths occur in low-income and middle-income countries. Children are at high risk of pollution related disease. Extremely low-dose exposures to pollutants during windows of vulnerability in utero and in early infancy, can result in

disease, disability and death in childhood and subsequently, across their lifespan. Pollution in such countries are caused by industrial emissions, vehicular exhaust and toxic chemicals in the environment. This has been particularly overlooked in both the international development and the global health agendas of global disease burden (GDB) management. Although more than 70% of the diseases caused by pollution are non-communicable diseases, intervention against pollution are barely mentioned in the Global Action Plan for the Prevention and Control of Non-Communicable Diseases. Pollution-related diseases cause productivity losses that reduce gross domestic product (GDP).

Pollution endangers planetary health, destroys ecosystems, and is intimately linked to global climate change. Coal is the world's most polluting fossil fuel, and coal combustion is an important cause of both pollution and climate change, ambient air pollution, chemical pollution, and soil pollution - the forms of pollution produced by industry, mining, electricity generation, mechanised agriculture, and petroleum-powered vehicles. Pollution control provides an extraordinary opportunity to improve the health of the planet. It is a winnable battle (For further reading: Landrigan et al. 2017).

The gut microbiome: what you need to know

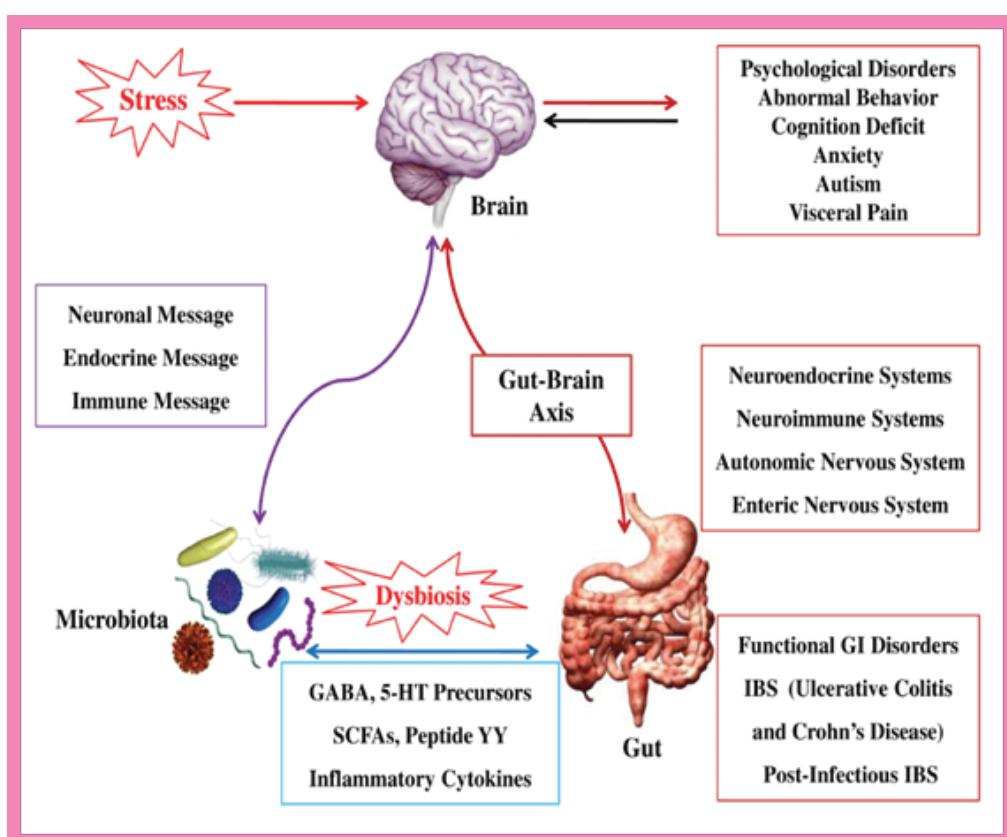
The collective genomes of all the microbes (bacteria, bacteriophages, fungi, protozoa and viruses) that live inside and on the human body is called the microbiome. The genes in our microbiome outnumber the genes in our genome by about 100 to 1.

A better understanding of the functional interactions between the human host and the microbiome would very likely lead to new diagnostic, prognostic, and therapeutic capabilities. The microbiota (bacterial flora) of the gut is very diverse, compared to other body sites, and there is considerable variation in the constituents of the gut microbiota among apparently healthy individuals.

As a way of accounting for the microbial variability among healthy individuals, researchers have tried to identify certain stable patterns of microbial populations in the human alimentary tract. Gut microbiota is integral to host digestion and nutrition, and they can generate nutrients from substrates that are otherwise indigestible by the host.

Microbes liberate short-chain fatty acids (SCFA) from indigestible dietary fibres. Specific SCFA may reduce the risk of developing gastrointestinal disorders, cancer, and cardiovascular disease. Acetate is the principal SCFA in the colon, and after absorption it has been shown to increase cholesterol synthesis. However, propionate, a gluconeogenerator, has been shown to inhibit cholesterol synthesis. Therefore, substrates that can decrease the acetate:propionate ratio may reduce serum lipids and possibly cardiovascular disease risk. Butyrate has been studied for its role in nourishing the colonic mucosa and prevention of cancer of the colon. Hence, fermented milk products like yogurt or cottage cheese (paneer) is healthier than plain milk, retaining all the nutritive value of milk.

Fermented milk products like yogurt or cottage cheese (paneer) is healthier than plain milk, retaining all the nutritive value of milk.



GABA: Gamma Aminobutyric acid; 5-HT: 5-hydroxytryptamine (serotonin)

A role for microbiota in irritable bowel syndrome (IBS) is suspected, and therapies that alter the microbiota, including dietary changes, probiotics and antibiotics, have shown encouraging results. One proposed pathway involved in IBS is through a microbiota–gut–brain axis, linking changes in the gut to symptom perception in the central nervous system. An interesting recent report demonstrated that the intake of a probiotic-rich fermented milk product resulted in alterations in brain activity in response to visual emotional stimuli (measured by functional MRI) as compared to the intake of a control product. The critical next stage that is underway is to investigate further, the functions of the microbiome. These studies will provide further insight into the host–microbiome interactions that contribute to health and disease, and eventually lead to therapies targeting the microbiome to maintain health, and to treat a variety of diseases. Good gut flora is essential for healthy lifestyle, consumption of fresh yogurt, avoidance of prolonged oral antibiotics, food rich in probiotic and prebiotics help control diabetes, delays or prevents Alzheimers and obesity, and ameliorates depression (For further reading: Shreiner et al. 2014).

Medicine: An art or a science of uncertainty and nobility?

There are moments when medical science works overwhelmingly, and we begin to see and think about the intricacies and idiosyncrasies of this complex science as it were. The common man sees medicine as an orderly field of knowledge and procedure. Much to our chagrin, it is not. It is an imperfect science; an enterprise of constantly changing knowledge, uncertain information, fallible professionals who are as human as the ones we are called upon to treat. And all the while, there are human lives on the line, at the other end of the deal. There is science in what we do. But there is also a fair element of habit, intuition and oftentimes, plain old guessing (calculated, of course). The chasm between what we know and what we aim for, persists in stark reality, and often, quite widely too. This is the chasm that complicates the science of medicine, makes it unpredictable, and gives it the nobility that we as medical professionals are laden with the herculean task maintaining its sanctity next to the stars in the skies.



For further reading: Atul Gawande's book on Complications - A Surgeon's notes on an imperfect science