Editorial

# How Healthy Are You?

**Dr. MohsinMasud Jan**
Editor

"Everybody is healthy until they become sick" still holds true as science advances with new healthcare concepts.

A few decades ago most doctors could say quite confidently that if you are not sick, then by definition you are healthy. But that was then. As medicine advanced and with it the sciences that support medical knowledge, the definition of health has started to change. The 'old' joke about getting old is perhaps more relevant than ever, if you wake up in the morning, and nothing hurts then you are as healthy as you are going to be. Generally speaking the absence of disease continues to be the basic definition of a state of health. The appropriate modifier now is 'apparent' health.

The ability to discover 'things' that are, or, could become wrong with our bodies has changed the very definition of 'disease'. Here I will just give just one example to illustrate this point. The presence of a mere 'gene' that predisposes women to breast cancer as they age, causes them to preemptively undergo mastectomies.

In a slightly less extreme fashion, most adults above a certain age are advised regular colonoscopies to find 'tumors' (polyps) that have the potential to become tumors or to find actual cancers. The polyps can be removed during the diagnostic procedure while real cancer on being discovered will need more definitive treatment. There are also diagnostic tests recommended for people with 'risk factors' that could lead to heart disease. These tests can detect heart problems before they produce what would be called 'disease' in a formal sense.

What it means is that almost every disease is already percolating in our bodies until such time that it finally becomes manifest. The obvious example of this 'sudden' manifestation of 'latent' disease is a person who was well enough in the morning but by the end of the day needed a life-saving heart procedure to even make it through the night.

All this leads to interesting problems in modern healthcare. We have 'newer and better' diagnostic procedures and tests that can provide important information about the extent and seriousness of medical conditions in time to prevent serious consequences. As these procedures and tests become 'famous', more and more patients demand such testing, often, without good reason. The cost of medical care then goes up as physicians often order tests as a part of 'defensive medicine'. This definitely contributes to the increasing cost of healthcare.

Even if we ignore the tussle between physicians and 'educated' consumers of medical services for the latest tests or preventive treatments, the fact remains that even when physicians recommend some of these tests and treatments voluntarily, they are doing it unnecessarily. Some of what was once considered 'good' medical advice is not considered good advice anymore. The most famous casualty is perhaps the 'annual check-up'. Most analyses of the benefits of this annual ritual have shown that such check-ups offer no health benefits.

There are two other rather commonly used tests that are being questioned. First there is the routine 'breast mammography'. The mammogram does identify the presence of abnormal tissue in the female breast. Once such tissue is identified it leads to biopsies and even eventual surgery for removal. Some of these cases might not even be cancer and do not really need to be removed. The other test is a Prostate Specific Antigen (PSA) that can identify prostate cancer. A positive test can lead to unnecessary prostate operations in patients that have cancer but the cancer is so slow growing that if it is left alone, the person might die of something entirely unrelated.

The new concept that seems to be the future of medicine is 'tailored treatments'. These treatments are based on an individual's 'genetics and physiology'. What this concept suggests is that there are few types of diagnostic testing or preventive as well as active treatments that are applicable to all people equally. For instance in the situations mentioned above, family history, genetic markers, environmental risk factors, individual habits and pre-existing medical conditions should determine what sort of investigations should be carried out in a particular person.

Another relatively new concept is also finding some traction. The idea is that of 'numbers needed to treat' (NNT). What this means is for instance in patients at risk for a heart attack that are placed on daily Aspirin is that how many patients would need to take a pill a day to avoid a heart attack. Statistics suggest that roughly two thousand people with the appropriate 'risk factors' would have to take an Aspirin a day for two years to prevent 'one' heart attack while it would still not prevent four heart attacks in this group. Considering the fact that Aspirin can produce serious side effects in some patients, the question has to be asked whether taking an Aspirin a day is really worthwhile in every patient with risk factors for developing an eventual heart attack.

That being said, in a country like ours, where people die every day of inadequate sanitation and malnutrition, all of that means little except for the elite of the country. But still, nevertheless, these are all goals and ideals that we should strive for; that in due time, as our healthcare system improves, these should be our ideals to strive for.