

Prevention is better than cure

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Received: 07.05.2012; Accepted: 02.11.2012

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■ **ABSTRACT** : The adage "Prevention is better than cure" is particularly appropriate for chronic diseases since the cost of treatment far outweighs the cost of disease prevention. Good health is not distributed evenly across the society. Proper diet, healthy environment, good hygienic practises is the key to good health. A healthy diet, exercise, proper nutrition, cleanliness and stress can all minimize the chance of developing many diseases like diabetes, hypertension, thyroid, CVD and alcoholism. In this paper an effort has been made to highlight the importance of good dietary habits, healthy living environment, good hygienic practices and related aspects of various diseases. If the community is enlightened, it is not difficult to achieve a productive life free from chronic ailment and diseases.

■ **KEY WORDS** : Public health, Preventive medicines, Living environment, Hygiene

■ **HOW TO CITE THIS PAPER** : Srivastava, Sangita and Fatima, Ammatul (2012). Prevention is better than cure. *Asian J. Home Sci.*, 7 (2): 592-596.

In the 20th century the concept of health promotion has begun to take shape. It has been realized that public health has neglected a citizen as an individual. Public health has been defined as "the science and art of preventing disease, prolonging life and promoting health efficiencies through organised community's efforts". And from the Indian Vedic system we always believed in the theory of "servey santu sukhina sarvey santu niramaya". Meaning thereby" let everyone be free from disease and lead a happy and contended life". Preventive medicine is applied to "Healthy" humans, customarily by action affecting a large number of medicine did not effectively only confine itself to vaccination but discoveries in the field of nutrition have added a new dimension of preventive medicine.

New strategies have been developed for combating specific deficiencies as for nutritional blindness and iodine deficiency disorder. The nutritional component of vitamins, minerals, proteins and other nutrients has its place in preventing many a disease. Researchers are being done to find more nutritional supplements like Spirulina, Aloevera and various other herbs which can meet the body's requirements for adequate nutrition.

With the advances of preventive medicines and practice of public health the pattern of disease has begun to change.

Many of the acute illness problems have been brought under control, however as old problems are solved new health problems in the form of chronic diseases are emerging for example diabetes, cardio vascular diseases, alcoholism, drug addiction, thyroidism, chronic urinary tract infection, hypertension, sleep disorders in our society.

A new concepts of risk factor as determinants of these diseases came into existence. These problems have brought new challenges to public health, which need new orientation towards social objectives.

Cholera which is often called the father of public health appeared first time and again in the western world during the 19th century. An English epidemiologist John Snow studied the epidemiology of cholera in London in 1854 and established the role of polluted drinking water in the spread of cholera. Then came a demand from people for clean drinking water. At that time the Thames was both a source of drinking water and a depository of sewage. Quiet like the current situation of our rivers. A Comprehensive piece of legislations was brought into force in England, the public health act of 1875 for the control of man's physical environment.

The early phase of public health is often called the "disease control phase". Effects were directed entirely toward general cleanliness, garbage disposal and quarantine

conventions were held to contain disease. America, France, Spain, Australia, Germany, Italy, Belgium and the Scandinavian countries developed a public health system by the beginning of 20th century broadly based on clean water, clean surrounding, wholesome condition of houses, control of offensive trades etc were laid in all the countries of western world.

The public health system has been very slow in India where the main health problems continue to be the same as faced by the western world 100 years ago. The determinants of good health are adequate income, nutrition, education, sanitation, safe drinking water, and comprehensive health care. We in India live in a developing country only 10-20 per cent of the population enjoys access to any of these determinants of good health. India has the largest no. of diabetics followed by thyroidism in the country. Needless to say about the consequential diseases which are the aftermath of having these chronic diseases.

Health is a fundamental human right. In India, millions of people are caught in the vicious circle of poverty and ill health. The cost of health care is rising without much improvement in their quality. Health is not mainly an issue of doctors, social service and hospitals. It is an issue of social justice.

Against the above background the 30th World Health Assembly resolved in May 1977 "The main social governments should be all citizens by the end of 2000 have a level of health that will permit them to lead a socially equal and productive life". This culminated in the international objectives of health for all.

Health for all means that health is to be brought within the reach of everyone in a given community. It also implies the removal of obstacle to health that is to say the elimination of malnutrition, ignorance, disease and contaminated water supply unhygienic housing, poor sanitation and cleanliness in the city.

It is common to see the mushrooming of so many nursing homes, hospitals, doctors, pharmaceutical shops, and all of them in good business in treating sick people, suffering from asthma, diabetes, CVD, kidney problems, kidney stones, fevers, hypertension, arthritis and obesity.

A question that comes to mind is, why so many people are sick. A healthy human body is designed to live for 120 years, if it is given the right food and conducive environment. Largely it is focussed on three factors. First and most important is ignorance – ignorance about nutrition. second is poor living environment and third is poor hygiene.

The environment is the complete atmosphere in which we live. India being divided into two countries the rich India and the poor India. The rich India keeps their homes clean and free from litter, but they have no concept of community cleanliness. Stray cattle, stray dogs, cow dung, dog poops, are very common sites. Pigs dwell in open sewage system of

the cities. All domestic waste comprising of polythenes, vegetable matter peels etc are thrown on the road and the garbage is not collected by any one.

The tubercular (*T.B. bacillus*) life cycle is between man and cow. We see cows eating debris on the roads, and these cows are milked and milk is sold to us, at the end of the day we are drinking debris through cow milk. Tuberculosis cannot be eradicated until measures are taken to keep cattle from eating roadside debris.

One third of the world's population is thought to have been infected with Tuberculosis. Tuberculosis is not uniform across the globe; about 80 per cent of the population in many Asian and African countries test positive in tuberculosis tests, while only 8-10 per cent of the United States population test positive.

Pork from these pigs contains tapeworm. This cycle of tape worm is between pig and man. If pork is not prepared in very hygienic conditions, then tape worm can easily enter the human body. People working on road side dhaba's preparing tea, and chat trolleys have no hygiene and sanitation sense.

As per the global standard of living data India has been placed on 127th rank just above only Burkina Faso and few other countries. The habit of throwing garbage in drains or in an open fields effects the beauty as well as the health status of a society but no one cares about these. People just want to throw their garbage from their houses and wants to make their houses as beautiful as they can but they did not think about the result of throwing garbage in an inappropriate place.

Poor living environment leads to parasitic infection and injuries. Pools of standing water and flooding can lead to increased incidence of malaria, and other mosquito-borne diseases, especially during the rainy season, placing workers and local residents at risk.

In the absence of regular collection of household solid wastes, organic waste fills up public spaces, backyards lanes, pathways and vacant lots, where it attracts disease carrying insects and pests and clog overflowing drainage channels, associate health problems include high incidence of cholera, diarrhoea and dysentery. Household's waste which keeps rolling on the road side is also associated with the spread of respiratory infections.

Poor hygiene is known to be unacceptable in our culture with good reason. Nobody wants to be around someone who smells badly or is not clean. Poor hygiene is known to have health effects as well, so it is important to keep our self clean.

Hygiene is more than just being clean. It is defined as the many practices that help people be and stay healthy. Practicing good personal hygiene is smart for two reasons. First, it helps prevent people from catching and spreading illness and disease. Second, it helps people feel good about themselves and their bodies. In Indian society people worship 11000 deities, they bathe in rivers or open taps, thus polluting the surroundings and cleaning themselves. Most people

perspire and smell of perspiration. They have a habit of spitting, chewing, beetle leaf, tobacco, they do not think of the effects of their activities on their own environment.

Good hygiene includes all the activities that must be done to keep ourselves and our surroundings healthy like, proper hand washing, care of our body's cleanliness, care of our house's cleanliness and all the activities that minimizes the chances of dirt and disease.

We are expected to maintain a certain degree of personal hygiene. When we neglect to clean and care for our body, we can find our self ostracized from friends and family. An unpleasant body odour, decaying teeth or unclean clothes could affect things from finding a job to making friends to finding a life partner. Poor hygiene can limit you socially and make you feel alone.

Practicing good hygiene will prevent the spread of illness and disease. Washing the hands periodically throughout the day will prevent the spread of colds, flu and other ailments.

The fault lies in our food habits for example-

Diabetes:

To Understand Diabetes, it is important to first understand the normal process by which food is broken down and used by the body for energy. Several things happen when food is digested. Complex carbohydrates breaks into the simplest sugar glucose which enters the blood stream, glucose is a source of fuel for the body. An organ called the pancreas makes insulin, the role of insulin is to move glucose from the bloodstream into muscle, fat, and liver cells, where it can be used as fuel.

There are 3 major types of diabetes type-1 diabetes, type-2 diabetes and gestational diabetes. Type-2 diabetes is far more common than other form of diabetes. It makes up most of diabetes causes. Type-2 diabetes is becoming more common due to increasing obesity and failure of exercise.

Our Indian diet comprises of 70 per cent carbohydrate rich food like, wheat rice, potato, sweets. Our festival of Holi, Deepawali, Eid, Raksha bandhan, and Christmas are all celebrated around eating and buying plenty of sweets. The sweetmeat shops appear like honey bee nests around festival days.

White sugar is white poison. It when eaten in the form of sweets is an overload of this disaccharide into our body. The small pancreatic gland is meant to produce just enough insulin to digest complex carbohydrates which we eat in our daily carbohydrate rich diet. Our diet constitutes of potatoes, wheat, rice, lentil, red gram, bread, pasta, noodles, biscuits, cakes, pastries, rasgullas, samosas, laddoos and refined flours. This little gland overworks for 20-25 years and then suffers a overwork syndrome, which in other words we call Type-2 diabetes.

The body consist of many glands. All other glands most of the times do not show any wear and tear throughout our life span. It is only our islet of langerhans that we over use

and fall prey to type-2 diabetes.

It is like your small maruti car which is made to run from Allahabad to Delhi every day the car would wear out. In the Same way we are very mean to our own pancreatic gland an overload of carbohydrate rich food the gland wear out. So the question is that how can we prevent diabetes?

We can prevent diabetes type-2 by changing our food habit of eating too much carbohydrate, by bringing difficult changes in the routine menu.

We should work closely with our health care provider to learn how much fat, protein and carbohydrates we need in our diet. Maintaining an ideal body weight and an active lifestyle may prevent type-2 diabetes.

To prevent type-2 diabetes:-

- Lead an active life.
- Eat complex carbohydrates and high protein rich diet.
- Eat a chapatti less than you think you would like to eat.
- Drink plenty of water.

One meal should consist of only live food. By live food we mean organic food which is not cooked the live cells of the organic food and the live body cells work in synergic to bring good health. Any food which is cooked at 130 F for long time becomes dead and we eat dead food. Substitute your diet with live foods like cucumber, radish, carrot, all varieties of fruits, as per person.

Hypertension:

Prevention:

Prevention of hypertension centres on avoiding or eliminating known risk factors. Even persons at risk because of age, race, or sex or those who have an inherited risk can lower their chance of developing hypertension. The risk of developing hypertension can be reduced by making the same changes recommended for treating hypertension.

- Reducing the salt intake
- Reducing the fat intake
- Losing weight
- Getting regular exercise
- Quitting smoking
- Reducing alcohol consumption
- Managing stress.

Thyroid:

The thyroid is a small gland, shaped like a butterfly, located in the lower part of the neck. The function of a gland is to secrete hormones. The main hormones released by the thyroid are triiodothyronine, abbreviated as T3, and thyroxin, abbreviated as T4. These thyroid hormones deliver energy to cells of the body.

Hypothyroidism:

When the thyroid gland is underactive, improperly

formed at birth, surgically removed all or in part, or becomes incapable of producing enough thyroid hormone, a person is said to be hypothyroid.

Hyperthyroidism:

When the thyroid gland becomes overactive and produces too much thyroid hormone, a person is said to be hyperthyroid. The most common cause of hyperthyroidism is the autoimmune condition known as Graves disease where antibodies target the gland and cause it to speed up hormone production

How to prevent thyroid disease:

- Too much soy should not be included in the diet. Excessive soy isoflavones may trigger or worsen hypothyroidism, goitre or nodules.
- Infants should not be fed on soy-based formulas. There's evidence that this can contribute to later risk of thyroid disease.
- Drink filtered water. Tap water may contain high levels of fluoride, and a rocket fuel manufacturing by-product known as perchlorate, these substances in water may trigger or worsen the risk of thyroid problems. Hard water contains calcium and oxalates which can cause stones in the kidney.
- Take moderate amount of iodine. Too little or too much iodine can increase your risk of hypothyroidism or goitre.
- Do not indulge in smoking. Smoking can damage the thyroid, and may worsen some existing thyroid.
- Reduce stress. Reducing stress using effective mind-body techniques can play a part in preventing thyroid disease.

Tips:

A healthy diet, exercise, proper nutrition, and stress reduction can all minimize the chance of developing thyroid disease. The first thing to do is to change your mood. If you are depressed, if you are unhappy, you cannot be healthy. Laughter is good for the flow of happy hormones. Laughing provides us with the natural inner massage, and through change of mood it can account for up to 30 per cent of cure!

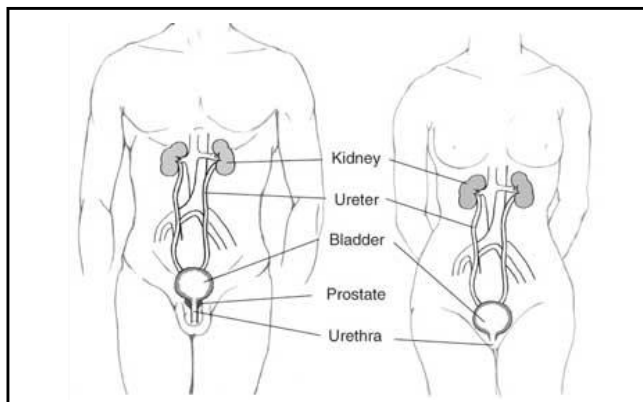
Urinary tract infection:

This is a very common problem that women suffer. This catches them after they reproduce, or if the sugar levels in diabetics are high and urine contains sugar, also it is caused by poor hygiene practices of not cleaning the toilet seats in public places or even in homes.

Women tend to get more bladder infections than men. This is probably because women have shorter urethras, so it is easier for the germs to move up to their bladders. The bacterium *Escherichia coli* (E.Coli) cause most UTIs.

How to prevent UTI:

Some of the prevention tips are



- Drinking lots of fluid can help flush bacteria from the system. Water is best. People should drink 6 to 8 glasses a day.
- Urinate often and when the first urge comes. Bacteria can grow when urine stays in the bladder too long.
- After using the toilets, always wipe the private parts from front to back. This step is most important after a bowel movement to keep from getting bacteria into the urethra.
- Wear cotton underwear and loose fitting clothes so air can keep the area around the urethra dry. Avoid nylon underwear and tight fitting jeans, which can trap moisture and help bacteria, grow.
- Each woman should leave the potty seat dry after wiping with paper. Urine dropped on the potty seat is often infectious.
- Cranberry juice has been used for more than a century as a home remedy to prevent and treat urinary tract infection. Constituents in cranberry called the proanthocyanins prevent bacteria from adhering to the walls of the urinary tract.

Diet can also help the urinary tract infection causes or make it worse. During an attack avoid the foods which have high acid content like coffee and tea, chocolates, citrus fruit and juices, pineapple, strawberries, tomatoes, wine, soda, chicken, beef, eggs and sour creams.

Alcoholism:

Alcohol is a clear drink that is made from corn, barley, grain, rye, or a beverage containing ethyl alcohol. It is a simple molecule with the chemical formulae C_2H_5OH .

Chemical changes:

Ethanol has the chemical ability to enter the bloodstream and various organs in the body very quickly. In fact, in the four or five seconds it takes for a mouthful of beer to reach the stomach, ethanol is already being absorbed by the gastro-intestinal tract (stomach and small intestine). From there, alcohol passes to the brain, where it acts on the neurochemical pathways that control many of the body's

functions. Alcohol acts on the brain as an anaesthetic, sedative, and stimulant, depending on how much of it is consumed. The effects of alcohol change the more one drinks.

Tea coffee, alcohol are all diuretics in their own right. They tend to extract water from the body hence causing dehydration. Blood becomes thick, leading to hangovers dizziness, loss of reasoning, and poor health leading kidney disease, stones, stomach cancer.

Prevention of alcoholism:

Alcohol is a social evil- an innocent social habit which can become a serious addiction. It adds to problems at home and work, to crimes and accidents.

Cardio-vascular diseases:

Cardio-vascular diseases have no geographic and racial boundaries. They occur throughout the world, in all races and in all strata of society, through variations between sexes, ages, and socio economic status do exist, they are life threatening and are responsible for the majority of deaths in many countries. Since they are often fatal biomedical research all over the world is directed towards prevention of heart disease at an early stage.

Combating heart diseases is one of the challenging problems of today's world. Treatment, through advanced, is only one component of the care of heart patients. It is expensive and often beyond the reach of the common man in developing countries.

Japan is unique among developed countries in the cardio vascular diseases has been low and has continued to decline, because in the Japanese diet is mostly based on lower saturated fat (meats) and higher omega 3 poly unsaturated fat (fish) may contribute to the lower prevalence of cardio vascular diseases.

Prevention of cardio-vascular diseases:

- Calories should be sufficient to maintain appropriate body weight for a given height.
- Take regular exercise.
- Quit smoking.
- Avoid drinking and consuming empty calories.
- Cut down salt use, eat foods in natural state. Keep the salt intake low, A little salt is divine, but too much is harmful.
- Eat more fresh foods as grown, like coarse grains, whole grains, cereals, pulses and vegetables, avoid refined foods, processed foods and sugars.
- Eat a high fibre diet.
- Maintained a desirable body weight eat to live, do

not live to eat.

Conclusion:

In today's stressful and fast-paced world, several people have a hard time making it through life without coming across major problems in life. Leading a healthy lifestyle, making good healthy choices and avoiding poor choices can immensely increase the overall life expectancy and general well being of an individual. A sound mind lives in a healthy body.

Proper diet is the key to good health and vigour. Diet and nutrition are synonymous with health. It provides the necessary nutrients which give energy, promote growth, and sustain the metabolic functions and repair processes that are essential for life. The preventive role of corrective nutrition is an ever evolving process.

A healthy lifestyle can keep one away from heart disease, obesity, low energy level, depression or even skin or hair problems. Though the words 'healthy eating', 'healthy lifestyle', 'fitness', etc may sound complex and seem rather difficult to practice in the course of the daily life.

Every one wishes to remain youthful even in old age, sensible and healthy food habits right from childhood coupled with good lifestyle can, not only delay ageing and increases the life span, but also adds to the quality of life.

"Self help is the best possible road to health, no one except you, is more interested in youth health"

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