



WHO ARE WE?

M.J. Charitable Trust is working to provide education and health services to the impoverished sections of society in India.

Dr. Ashok Kumar Jainer established the trust in 2008 to fulfil his dreams of a better society for all. This Trust provides selfless and unconditional service to the mankind. Everyone working in the Trust is committed, dedicated and working unpaid, there is no admin cost. The Trust is registered and has been awarded 80G of the income tax act of India.

VISION: A world in which everyone obtains good education and health.

MISSION: We seek a world of hope and working to ensure that kids growing up in poverty get an excellent education and health.

VALUE: Improve well being of people and convert their suffering into self-reliance. We treat them with respect, dignity, compassion and always be responsive to their needs.

OBJECTIVES

1. Provide quality assured education for children growing in poverty.
2. Provide prompt and safe health care facilities to the poor in rural areas.
3. Provide food and basic amenities for people living in slums.
4. Raising awareness of common illness in rural part of India.

LISTEN TO OUR EXPERTS

AWARENESS ON CANCER



- **Dr. Sudhir Rawal (MBBS, MS, MCH, Director of Rajeev Gandhi Cancer Institute) on Prostate Cancer**

Prostate cancer is a disease in elderly men; however, it could also occur in young boys. It is the most common form of cancer, in male, in the USA and western Europe. However, in last few years, the cases of prostate cancer has also increased in India. Previously, it was the fourth most common type of cancer, but now it has come to the second position following head and neck cancer.

The cases depend upon the screening. In India and west, it is only voluntary screening. The screening is done by blood test PSA (prostate-specific antigen) which is now available all over the country.

Modifiable risk factors include:

In India, PSA is suggested, to the men who are, above 50 years, facing problems in passing urine (lower urinary tract symptom), also, to asymptomatic male, above 45 years, whose father or brother had prostate cancer. Increased PSA is suggestive of cancer prostate. However, it has to be confirmed by biopsy, which is done by perineal or transrectal route as a daycare procedures, that prostate cancer is curable in early (organ-confined) stage and the treatment options are surgery (removal of the prostate), radiation therapy, and ablative therapy (HIFU/-CYRO). One can do open surgery or robotic surgery, according to their preference and health. Another stage, in which prostate cancer can be detected, is the metastatic stage which is an advanced stage. Treatment for the patients at the metastatic stage is hormonal therapy. Hormones are injected into the human body in every one, three, or six months or a small surgical procedure can be done in which the testicles are removed. Beside, hormone therapy patient is also given calcium and Vitamin D. If the first line fails, the patient is given the second line of treatment which includes hormone therapy as well as chemotherapy. Overall, the prognosis for prostate cancer is excellent for early stage, and fairly well for the advanced stage.



- **Dr. Udaiveer Panwar MBBS, MD, DNB, FRCR, Consultant in UK on Cancer Information for General Public**

What is cancer?

The growth of cells (abnormal cells) in an uncontrolled manner and developing the ability to infiltrate locally as well as spreading to other areas is cancer.

How does it develop?

Each cell has a nucleus which stores key information with specific coding within the genes.

These genes are damaged and repaired on day to day basis. The repair process may involve self-destruction of abnormal cell or destruction by an active immune system. Abnormal cells that manage to escape these defenses start to grow in an uncontrolled manner and turn into cancer.

Who gets it?

1 in 2 people will develop cancer in their lifetime (UK statistics). Who gets cancer depends on a complex interplay of our genes, environmental factors, and our lifestyle. Smoking, Obesity, and Alcohol are the three most important preventable causes of cancer worldwide. Infections contribute to about 1 in 5 cancers worldwide and even higher in lower socioeconomic regions. Only 2-3% of cancers are linked to faulty genes from birth e.g., BRCA gene carrier.

Can it be prevented?

Prevention is always better than cure. So far cervical screening is the only successful vaccine. Girls between the age of 12 to 13 years are offered vaccine against human papillomavirus (HPV). Work is underway to develop a vaccine against Melanoma.

Can it be detected early?

Early detection save lives and successful screening program exists for Bowel cancer, Breast Cancer and Cervical cancer. Men over the age of 50 years can ask for PSA testing although it is not reliable enough to be used for formal prostate cancer screening. For other cancers research is continuing to identify tests that can reliably detect cancers early to save lives.

Can the risk be reduced?

It is estimated that 4 out of 10 cancer cases could be prevented through lifestyle changes - NOT SMOKING, MAINTAINING HEALTHY BODY MASS INDEX, EATING BALANCED HEALTHY DIET, CUTTING ALCOHOL CONSUMPTION, USING SUN PROTECTION AND KEEPING ACTIVE. 1 in 10 lung cancers in the UK is caused by air pollution. The prevalence will be higher in countries with higher level of air pollution. Worldwide air quality is represented by air quality index (AQI) with a reading below 100 are considered satisfactory air quality and below 50 is considered good.

How is it treated?

Surgery, radiotherapy, and chemotherapy remain the mainstay of cancer treatment. Targeted treatment and immunotherapy is being extensively researched in recent years and becoming standard of care for certain cancer type. It is hoped that more cancers are likely to benefit from these newer treatments.

What is new about cancer?

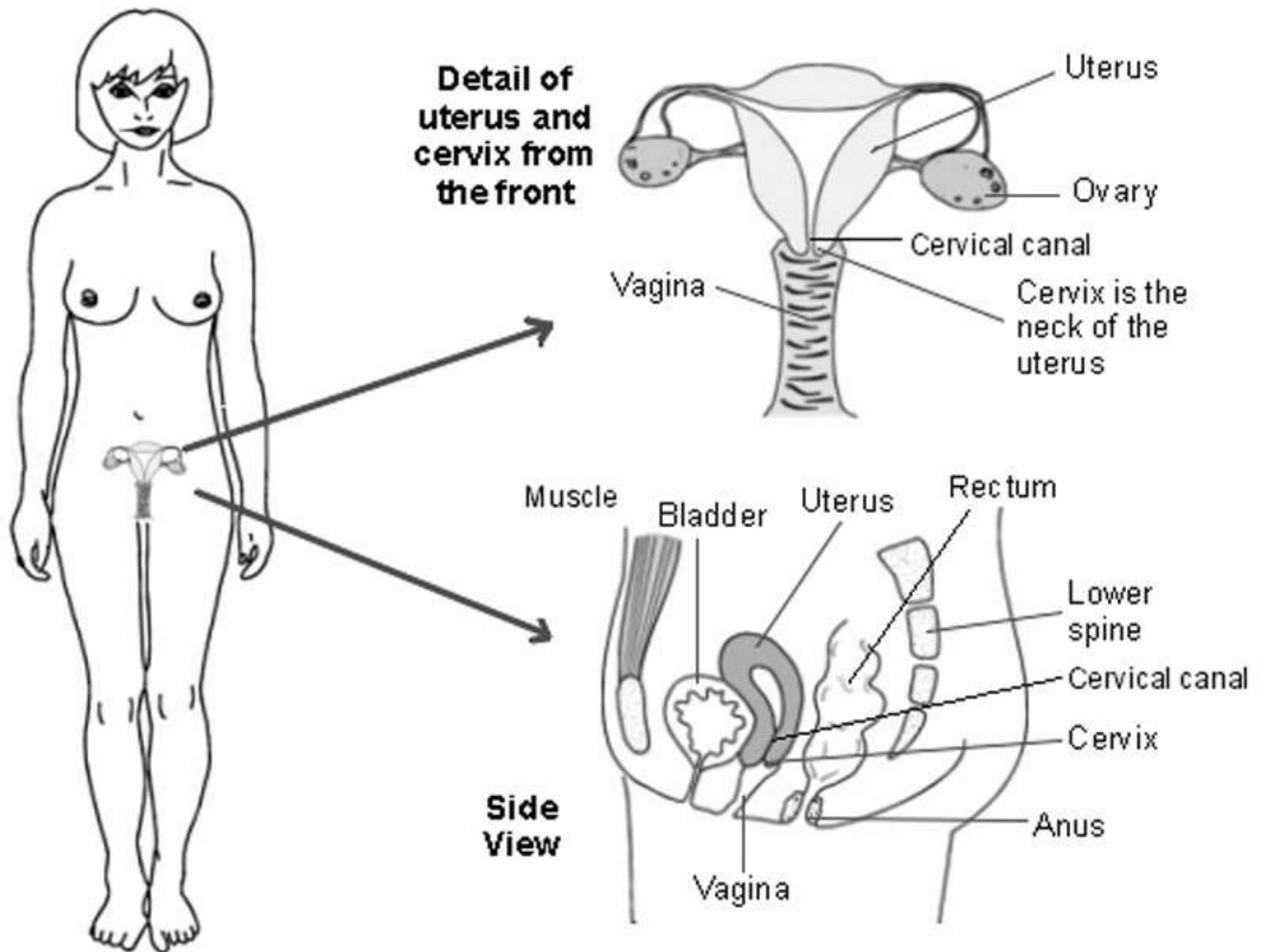
Cancer is the highest researched field at present. A better understanding of cancer at the molecular level has sub-classified cancers to allow more individualistic treatment based on individual cancer subtype.



- Dr. Abha Sinha (MD, MRCOG, Consultant Obstetrician and Gynaecologist, Clty Hospital Birmingham, UK) on Cervical Cancer

What is cervical cancer?

The cervix is the lower part of your womb (uterus) which extends slightly into the top of your vagina. The cervix is often called the neck of the womb. The surface of your cervix is covered with skin-like cells.



There are two main types of cervical cancer:

Squamous cell cervical cancer is the most common. This develops from a skin-like cell (a squamous cell) that covers the neck of the womb (cervix), which becomes cancerous.

Adenocarcinoma cervical cancer is less common.

Who gets cervical cancer?

Most cases develop in women aged in their 30s or 40s. Some cases develop in older and younger women. It is rare in women aged under 25 years.

Risk Factors

The fact that HPV infection is very common but cervical cancer is relatively uncommon suggests that only a very small proportion of women are vulnerable to the effects of an HPV infection. There appear to be additional risk factors that affect a woman's chance of developing cancer of the cervix. These include:

- Smoking - women who smoke are twice as likely to develop cervical cancer; this may be caused by the harmful effects of chemicals found in tobacco on the cells of the cervix.
- Taking the oral contraceptive pill for more than five years
- Having children (the more children you have, the greater your risk) – women who have two children have twice the risk of getting cervical cancer

Cervical cancer symptoms

You may have no cervical cancer signs at first, when the tumour is small. As the tumour becomes larger, symptoms include:

- Bleeding between normal periods (intermenstrual bleeding).
- Bleeding after having sex (postcoital bleeding).
- Any vaginal bleeding in women past the menopause.
- A vaginal discharge that smells unpleasant.
- Discomfort or pain during sex.

All the above symptoms can be caused by various other common conditions. But if you develop any of these symptoms, you should see a doctor.

How is cervical cancer diagnosed?

To confirm the diagnosis

A doctor will usually do a vaginal examination if you have symptoms which may possibly be cervical cancer. He or she may feel an abnormal neck of the womb (cervix). If cervical cancer is suspected, you will usually be referred for colposcopy. Colposcopy is a more detailed examination of the cervix. During colposcopy it is usual to take a small piece of tissue (biopsy) from the cervix. The biopsy sample is then examined under a microscope to look for cancer cells.

Assessing the extent and spread

If you are found to have cervical cancer then further tests may be advised to assess if the cancer has spread. For example, a computerised tomography (CT) scan, a magnetic resonance imaging (MRI) scan, a chest X-ray, an ultrasound scan, blood tests or other tests. This assessment is called staging of the cancer. The aim of staging is to find out:

How much the tumour has grown and whether it has grown to other nearby structures such as the bladder or back passage (rectum).

Whether the cancer has spread to local lymph glands (nodes).

Whether the cancer has spread to other areas of the body (metastasised).

Cervical cancer treatment

Treatment options which may be considered include surgery, radiotherapy, chemotherapy or a combination of these treatments. The treatment advised for each case depends on various factors. For example, the stage of the cancer (how large the first (primary) cancer tumour is and whether it has spread), your general health and also if you are planning on having children.

You should have a full discussion with a specialist who knows your case. They will be able to give information on:

- Likely success rate.

- Details of possible side-effects.

- The various treatment options for your type and stage of cancer.

Surgery

An operation (called a hysterectomy) to remove the neck of the womb (cervix) and the womb (uterus) is a common treatment. If the cancer is at an early stage and has not spread then surgery alone can be curative. In some cases, in very early-stage cancer, it may be possible just to remove the part of the cervix affected by the cancer without removing the entire uterus. This would mean that you could still have the chance to try to have your own children.

If the cancer has spread to other parts of the body, surgery may still be advised. Even if the cancer is advanced and a cure is not possible, some surgical techniques may still have a place to ease symptoms.

Radiotherapy

Radiotherapy is a treatment which uses high-energy beams of radiation which are focused on cancerous tissue. This kills cancer cells or stops cancer cells from multiplying. Radiotherapy alone can be curative for early-stage cervical cancer and may be an alternative to surgery. For more advanced cancers, radiotherapy may be advised in addition to other treatments.

Even if the cancer is advanced and a cure is not possible, radiotherapy may still have a place to ease symptoms.

Chemotherapy

This is a treatment using anti-cancer medicines which kill cancer cells or stop them from multiplying. Chemotherapy may be given in addition to radiotherapy or surgery in certain situations.

Cervical cancer prognosis

The outlook (prognosis) is best in those who are diagnosed when the cancer is confined to the neck of the womb (cervix) and has not spread. Treatment in this situation gives a good chance of cure for 8-9 women out of 10. For women who are diagnosed when the cancer has already spread, a cure is less likely but still possible. Even if a cure is not possible, treatment can often slow down the progression of the cancer.

Prevention of cervical cancer

Many cases of cancer of the cervix are already prevented through the cervical screening programme. In this programme, women in the at-risk age category have regular smear tests. This test looks for early changes in cells, which could turn into cancer. If early changes seem to be progressing towards cancer, you can have treatment to stop you developing cervical cancer. Find out more about the cervical smear test.

As above, it is also hoped that the HPV immunisation programme will prevent many cases of cervical cancer.



- **Dr. Sanjay Tewari (MBBS MD MRCPCH PhD FRCPath) on Paediatric Leukaemia**

Leukaemia is a cancer of white blood cells. All the blood cells are made in the bone marrow, the spongy tissue found inside the bones. The bone marrow produces three main types of cells.

- Red blood cells, which carry oxygen around the body
- Platelets, which helps the blood to clot and prevent bleeding
- White blood cells, which fights against infection

There are two different types of white blood cells: lymphocytes and myeloid cells. These cells work together to fight infection and are normally produced in controlled way. In leukaemia, the cells continue to divide in the bone marrow, and do not mature.

There are four main types of leukaemia:

- Acute lymphoblastic (ALL)
- Acute myeloid (AML)
- Chronic lymphocytic (CLL)
- Chronic myeloid (CML)

Chronic leukaemias usually affect adults and each leukaemia has its own characteristics and treatment. ALL is the most common form of acute leukaemia seen in children followed by AML (20%).

Cause

In most cases of leukaemia there is no obvious cause however, it is important to understand that: leukaemia is not contagious and is not passed from a parent to a child. There are only a few risk factors

- Exposure to radiation.
- Exposure to certain chemicals example benzene.
- Exposure to human T-cell leukaemia/lymphoma virus (HTLV-1) can cause a rare type T-cell ALL.
- Certain inherited syndromes increase the susceptibility to ALL eg Down syndrome.
- ALL is more common in males than in females.

Signs and Symptoms

Are vague and nonspecific but are most commonly caused by lack of normal blood cells. This leads to:

- Anaemia (due to lack of red cells)- Weakness, tiredness, short of breath
- Infections (due to lack of normal white blood cells) - Fever, malaise and sweats
- Bleeding and bruising (due to lack of platelets)
- Young children may complain of pain in bones or joints
- There may be enlargement of lymph nodes, spleen/liver

Diagnosis

A blood test usually shows low number of normal blood cells and the presence of abnormal leukaemia cells. A sample of bone marrow is usually needed to confirm the diagnosis. A sample is also sent to genetics department to look for any abnormal chromosomes and also to the molecular lab for more specialized tests. A test called lumbar puncture is also done to see if the spinal fluid contains any leukemic cells.

Treatment

The aim of the treatment is to destroy the leukaemia cells and to allow the bone marrow to work normally again. Chemotherapy is the main treatment for ALL and AML and is given according to protocol or regimen. The children are risk stratified according to age, white blood cell count and cytogenetics and receive regimens according to risk factors. The chemotherapy is given in blocks or phases and disease assessment is done as per the protocol. The children are monitored closely as the chemotherapy not only kills the cancer cells but also normal cells.

In ALL the event free survival with current protocols is more than 90% and for AML it is more than 60% over 5 years.

Some of the children with high risk disease or who relapse following chemotherapy are considered for bone marrow transplantation. A matched sibling donor is preferred because such transplants are associated with fewer infections and relapses.

AWARENESS ON HEART DISEASE



- Dr. Rajeev Rajput, MD Medicine, DM Cardiology, Fellow Cardiology Society of India, Co-ordinator Heart Failure Services, Apollo Hospital, New Delhi on Heart Diseases

How common are heart diseases in our country?

Heart Diseases are the leading cause of death and disability in our country affecting millions of people. Due to better medical care, the life expectancy is getting better and communicable diseases are being treated effectively so we are witnessing an increase in the prevalence of heart diseases.

Is it correct that heart diseases occur more commonly in the western world?

No, it's a myth. Heart diseases are more common in the Indian and Asian population due to genetic predisposition and higher prevalence of important risk factors. India has the largest number of diabetics and heart patients.

Heart diseases in Indians occur at a younger age and more commonly involves multiple arteries so the response to treatment is worse than western population. The direct and indirect impact on the individuals and society is tremendous as it takes away the most productive years.

What are the risk factors for heart diseases?

Common established risk factors are Diabetes, hypertension, high cholesterol, smoking and family history of heart diseases. Sedentary lifestyle, psycho-social stress, and faulty dietary patterns are also important.

Tobacco consumption in various forms is increasing in Indians while it's on the decline in the western world. The diagnosis of various risk factors is often missed and their treatment is not proper and it increases the risk of heart diseases. Less than 25 % of patients with high Blood pressure get proper treatment. Diabetes is quite often going undiagnosed till it causes serious complications.

What are the common symptoms of heart diseases?

The common symptoms are chest pain, breathing difficulty, undue fatigue, swelling over body and loss of consciousness. Many times even the first presentation may lead to massive damage to the heart and even death. The commonest mistake is that people do not take note of their symptoms and often miss the early warning signals. This can be taken care by generating awareness among general public about the benefits of early diagnosis and treatment.

The tests which are generally needed to diagnose heart problems are fortunately available to the vast majority of cities but lacking in small towns and villages. A lot of effort is needed on part of the government and social organizations to work in this direction and huge expenditures are needed to create infrastructure.

What are the treatment options for heart diseases?

There have been tremendous advancements in the treatment of heart diseases in last few decades. Effective medications, better diagnostic tests and interventional treatment like angioplasty, stenting, and bypass surgery are now available to treat heart diseases. Angioplasty and stenting have emerged as a useful method to treat blockages and medicated stents can provide a long-term solution to many patients. Stents are not a temporary solution as it's a common feeling in the general population. Bypass surgery has also become very safe and patients can return to their normal work within few weeks and have an absolutely normal life and can resume their work.

Cost and affordability remain an issue as public setups are just too inadequate to deal a large number of patients and private setups are beyond the reach of the majority. The insurance sector is picking up and more public education is needed to encourage healthy people to take insurance cover. It is paradoxical that those who are not able to afford the treatment do not have insurance. The government's latest National medical Insurance policy is a welcome step in this direction if it is implemented properly.

Can the heart diseases be prevented?

Yes, to a large extent Coronary artery disease can be prevented. Regular exercise, avoiding tobacco, strict control of Diabetes, high BP and High cholesterol and eating proper diet can prevent heart diseases to a large extent. Yoga and relaxation exercises also have some role in prevention.



- Dr. Ravish Katira, MBBS (Hons.), MD (Medicine), DM (Cardiology), FRCP (London), Consultant Cardiologist & Postgraduate Tutor, St. Helens & Knowsley NHS Teaching Hospitals, Prescot, U.K on Prevention of a Heart Attack

Cardiovascular disease is the leading cause of deaths globally. Approximately 40 Americans die every second due to cardiovascular disease.

Several people die from a heart attack every minute in India. Many of these deaths can be prevented. There are modifiable and non-modifiable risk factors for heart attacks.

Modifiable risk factors include:

- Smoking - This doubles your risk of a heart attack. Second-hand smoke is also a significant risk factor. Smoking damages and narrows the blood vessels supplying the heart. Smokers should seek advice about stopping smoking.

- High blood pressure - This can be reduced with lifestyle choices such as regular exercise and a healthy diet, as well as medication. The risk begins to increase after a BP of 115/70 mm Hg; and doubles with each 10 mm Hg rise in systolic (upper reading) and with each 5 mm Hg rise in diastolic (lower reading). Measuring BP at home is a better measure of your risk as compared to measuring BP at a cardiologist's clinic; therefore, investing in a BP cuff meter is sensible. However, for home BP measurements one should use regular upper arm instruments and not wrist or finger units.

- Being overweight - A healthy diet and regular exercise can help to reduce your weight. Weight loss plans should be realistic and sustainable in the long-term. Portion control and mindfully moving away from food before you are 'full' is a useful strategy.
- High cholesterol- Cholesterol is a fatty substance found within the blood. High levels of 'bad cholesterol' increase the chance of a blockage in the arteries supplying the heart. LDL cholesterol is 'lethal' or bad cholesterol; HDL is 'healthy' or good cholesterol. The lower your LDL and the higher your HDL; the better is your prognosis. The level of cholesterol in your blood is dependent on-
 - (i) the amount produced by your liver (genetic)
 - (ii) amount absorbed by your gut (some from what you eat but a lot from what your liver produces and secretes into your digestive tract and your age- cholesterol rises with age.
 - (iii) Cholesterol can be reduced with a healthy lifestyle and by medications such as statins.
- An inactive lifestyle - Inactivity is an independent risk factor for heart attacks. Moderate physical activity for at least 30 mins on the most days in a week is recommended. Studies indicate that 2 miles of cumulative walking per day are good for healthy living. Exercise has other pleiotropic beneficial effects like it helps release endorphins which fight anxiety and depression.
- Unhealthy diet - A balanced diet with low levels of fat, salt and sugar is recommended. Healthy food is real unprocessed, whole (can be recognized), whole grain brown bread, brown rice, legumes, vegetables, and fruits. Food should be either raw or baked or steamed or broiled but not fried. Food should be rich in nuts and seeds; quinoa, chia, amaranth, flax seeds, soy, and almonds. The decrease in saturated fats can be simply translated as decrease intake of processed meats such as hot dogs, ham, beef, turkey, chicken and dairy (butter, ghee, cheese, and milk). The decrease in sugars can be simply translated as avoiding fruit juices, soda drinks and added sugars in processed foods such as cakes, biscuits, cookies, ice cream, and candy.

- Diabetes - Preventing diabetes and controlling your blood sugar levels if you are already diabetic can reduce the risk of a heart attack. A diabetic is 'deemed' to have already 'had' a 'heart attack'.
- Stress and Depression - Stress; if severe can cause heart attacks and sudden death. Lifestyle modifications, exercise, adequate sleep, a good marriage, laughing, volunteering, attending religious services, relaxation techniques and medications such as antidepressants may be helpful to reduce the risk of a heart attack. Speak to a doctor if you are worried about these problems.

Non-modifiable risk factors include:

- Family history
- Ethnicity
- Male
- Age



- **Dr. SN Khanna (Cardiothoracic Surgeon at Escort Hospital, MBBS, MS, MCH) on Coronary Artery Bypass Grafting**

Coronary artery disease (CAD) is the leading cause of death worldwide (31%). India has the maximum number of CAD patients, and deaths due to it, in the world. Moreover, the disease is very aggressive, occurring in the younger population, and at an early age in females. However, the reassuring fact is that it is preventable. Therefore, awareness of the risk factors for CAD and their prevention is of utmost importance.

Prevention from CAD is three dimensional - Exercise, Diet, and Mind. Exercise includes an hour of yoga, brisk walk or outdoor sports; diet includes at least five servings of fruits per day, a lot of greens, whole grain and avoidance of sugar, carbohydrates and saturated /hydrogenated/Trans fats. Equally important, if not more is a healthy mind- a loving, forgiving, and self-less mind!

The heart has three coronary arteries, which supply blood to the heart, which, when blocked, affect the blood supply to that particular segment of the heart.

The blockage is bypassed when critical (>70% diameter narrowing which is equivalent to >90% (r²) area narrowing) using conduit arteries from the back of the chest bone (sternum)- the internal mammary artery or arteries of the hand (radial artery) or leg veins. The procedure, if done before the permanent damage (myocardial infarction-MI), leads to a normal life, afterward, in quality and lifespan. The coronary artery bypass grafting (CABG) has become quite safe and standardized procedure. Earlier, the heart and the lungs used to stop during surgery, and the heart-lung machine was used to make them functional. But, now, the surgery is performed on a beating heart. It minimizes blood loss and hospital stay. The patient starts walking the next day.

On the other hand, if one has untreated coronary artery disease, it can be a major risk to health. Almost half of the patients reach the hospital in the emergency state, with myocardial infarction, in which case the mortality is high and secondly, even on survival, the long-term outcomes are not the same as in patients without MI.

The medical treatments are becoming advanced with technology, recently. In terms of CABG, it has become minimally invasive- small incisions, Robotic heart on a beating heart, hybrid surgery, and others.

Another issue is substituting CABG with PTCA (Percutaneous Transluminal Coronary Angioplasty). While CABG has better long-term results in the left main coronary artery disease, multiple blockages, calcified lesions, long blockages, osteo-proximal blockages. PTCA is preferred when the lesion is localized- single or- double vessel coronary artery disease.

To conclude, the primary treatment of coronary artery disease is prevention, in term of exercise, diet and a stable mind. However, when one has a disease, it is safer to undergo CABG than defer. Also, substituting CABG with PTCA is not advisable and leads to compromise in short as well as long-term results.

AWARENESS ON MENTAL ILLNESS



- Dr Somashekar, DPM, MD, DNB (Psychiatry) consultant psychiatrist in the UK on Suicide: A Brief Overview

Worldwide, more people die by suicide than by homicide and war. Globally, suicide accounts for about 1-2 percent of all deaths. The global rate is about 16 per 1000000/year or about 1 suicide per every 6000 population in a year. It is a leading cause of premature death among young and healthy adults more frequent than deaths due to road traffic accidents. It is the second leading cause of death among young people aged 15-24.

For every death by suicide, there are likely between 10 to 15 suicide attempts. This may be less in India due to the method of suicide as the common methods of suicide are hanging, drowning poisoning and self-immolation and the chances of survival are very low. In most countries (except in China) more males successfully commit suicide and more women attempt suicide. Male: female ratio is 2:1 to 4:1.

What are the causes?

People usually link the last significant event in a person's life to suicide however it is not always true. Suicide is an endpoint of a complex series of psychological, social and biological problem. It is the last psychological step towards emotional turmoil or crisis. Therefore it is not possible to point out a single cause.

- Relations to Mental illness
- The chance of mentally well person committing suicide is exceptional.
- Most patients who commit suicide have a psychiatric disorder at the time of death.

Common illnesses are depression, bipolar disorder and psychosis and Alcohol and drug misuse. The suicidal patient typically feels hopeless, worthless and helpless. They believe that their problem has no solution and the pain associated with the problem is unbearable.

Research has also noted that most patients who successfully commit suicide would have given some indication in the last few weeks to their near and dear one. They may do it directly or indirectly. For example, they do it directly by writing a suicide note, telling someone that they won't commit suicide, call someone after taking an overdose of medication. They may indirectly express their wishes by stating life not worth living, unexpectedly write a will or unexplained change in behavior etc. This is a crucial time to seek professional help

What to do if someone is expressing suicidal ideas?

Listen - you may be the last hope, a sympathetic and non-judgmental listening may help the person see things in a different perspective. He may reappraise his decision and decide to seek professional help.

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Listen - you may be the last hope, a sympathetic and non-judgmental listening may help the person see things in a different perspective. He may reappraise his decision and decide to seek professional help.

- Acknowledge the suffering, not to trivialize
- Understand the situation and not to give premature advice
- Seek professional help as soon as possible. If the person is in crisis, safety to take priority and everything can wait. Once the crisis is over and the person feels safe look for causes and how they can be addressed.
- Most important intervention is the treatment of underlying psychiatric illness.

Intervention

Suicide does not occur in a vacuum and various factors play a role. Therefore the management should be directed at an individual, family, and societal level. Due to high association with mental illness - Nearly all need professional help.

All patients with suicide attempt should be assessed by a mental health professional. The elements of assessment include recognized factors which predispose individual for suicide, assess the seriousness (technically called suicide intention), evaluate for mental health diagnosis and treat effectively. Contrary to popular belief, most mental illnesses can be easily diagnosed and treated with simple and safe medication.

In cases of a severe form of mental illness, they need ongoing treatment from psychiatric services



- Dr Meha Verma, MBBS, MD final year from PGI Chandigarh on Depression

Depression is a common mental illness that negatively affects how one feels, thinks and acts. Depression is very common illness with around 300 million affected worldwide, in India alone the figures have been increasing significantly with more than 56 million i.e. 4.5% population being affected at present. Depression has been ranked to be the single largest contributor to global disability by WHO and is the commonest cause for suicide-related deaths.

How to Diagnose?

Depression can be diagnosed by taking a detailed history and clinically assessing the patient on the basis of symptoms which must be present for at least 2 weeks. Depressive symptoms can vary from mild to severe and can include core symptoms of sadness of mood, loss of interest and enjoyment, loss of energy accompanied by other symptoms including decreased attention & concentration, changes in sleep & appetite, feeling worthless or guilty, feeling hopeless regarding future and in severe cases ideas of killing oneself or suicidal attempts.

Depression is different from "being sad".

Often being sad or being in grief after any loss, are mistaken with depression. Though grief which occurs after any traumatic event and depression have considerable overlap the difference lies in the fact that in grief painful feelings come in waves and are not persistent and pervasive like in depression. In grief, self-esteem is usually maintained while in depression feelings of worthlessness and self-loathing are common.

Depression and Anxiety

In anxiety, there is apprehension about what could happen in future or worried thoughts or belief that something could go wrong and might involve avoidance of those things that could further increase anxiety but in depression, the patient feels sadness about the future and lacks belief that positive things might occur. Unlike anxiety, in depression there is less worry rather a bleak view of future is present. Both disorders often coexist.

Causes

Several factors can lead to depression:

- The chemical imbalance in the brain
- Genetic predisposition i.e. runs in family
- Personality including the ability to cope
- Environmental factors: stressful events, continuous exposure to violence, neglect, poverty.

Treatment

Depression is amongst the most treatable mental disorders. Treatment modalities are:

- Medicines: Antidepressants
- Psychotherapy "talk therapy"
- Relaxation exercises
- Electroconvulsive therapy
- New treatments: Repetitive transcranial magnetic stimulation. Patients with depression need adequate support and awareness can reduce stigma and loss due to this illness.



- Dr. RK Thukral, MBBS, MD (Psychiatry) on Obsessive Compulsive Disorder

Obsessive Compulsive Disorder (OCD) is a disorder in which people have recurring, irrational, intrusive and irresistible thought against their will. Patients know that these are irrational thoughts but can't resist them and feel very distressing. These repetitive and intrusive thoughts lead to ritualistic behavior such as checking things, again and again, washing hands again and again. These thoughts have certain themes such as doubt and checking, dirt and contamination, religious, sexual and aggressive. Most common themes are 'dirt and contamination' and 'doubts and checking'. This illness generally starts around the age 20 years and is prevalent in 1 percent population.

Clinical example: There was a lady who will take hours and hours when taking bath. If she enters the bathroom other family members will be late as she won't come out despite on repeated request. She will also have a difficulty in making a decision, she will always have a fear that she may get infected, her hands are dirty these thoughts will go on and then she will start washing her hands sometimes using a toothbrush to clean her nails. She won't allow anyone to touch her clothes because she will start thinking that he may have passed the germs. She won't allow anyone to enter her house with shoes on, as she will start thinking his shoes may have dirt and germs.

Causes:-

Research indicates that OCD may run in families; it may have an association with an underlying obsessional personality profile.

Symptoms:-

People with OCD may have symptoms of obsessions, compulsions, or both, like:

- Fear of germs or contamination
- Unwanted, forbidden or taboo thoughts involving sex, religion, etc.
- Ordering and arranging things in a particular way
- Excessive cleaning or hand-washing
- Repeatedly checking on things
- Compulsive counting

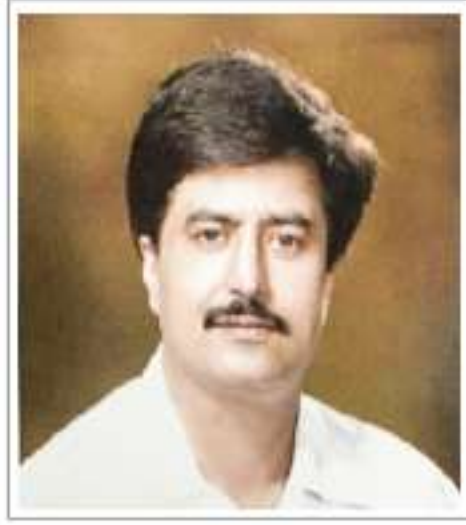
Treatment:-

Medication predominantly antidepressants in particular SSRIs and certain types of cognitive behavior therapy have a significant therapeutic role. Exposure and response prevention (ERP) [in which individuals confront their fears and discontinue their escape response] is an evidence-based treatment for people experiencing ritualistic behavior as a part of OCD.

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