



WORLD HEART DAY 2021 THEME:

Harnessing the power of Digital Health to improve Awareness, Prevention and Management of CVD globally

Cardiovascular disease (CVD) remains the world’s number one killer, resulting in > 18.6 million deaths per year. Of these deaths, 85% are due to Coronary Heart Diseases (e.g heart attacks) and CVD (e.g. strokes) i.e. more than victims of Cancer, HIV, AIDS & Malaria and mostly affect low- and middle-income countries. CVD is a class of diseases that affect the Heart or Blood Vessels (Veins and Arteries).

Causes: Smoking, Diabetes, High Blood Pressure, Obesity, Air Pollution and living under stress.

COVID-19 has been heart breaking for the 520 million people living with CVD. They are more susceptible to developing severe forms of the Virus. Many are afraid to attend routine and emergency appointments and have become isolated from friends and family. They should be told that they are vulnerable and should shelter in place.

We have all been living through healthcare crisis & it has highlighted an urgent need to find different and innovative ways to connect people to heart health, particularly in lower resource areas and communities.

We are requesting the world to use heart to connect by using knowledge, compassion and influence to make sure you, your loved ones and the Country you are part of have the best chance to live heart-healthy lives. It is about connecting with our own hearts, making sure we are motivating and nurturing them as best we can and using the power of digital technology to connect every heart, everywhere.

EQUITY : Half the world’s population doesn’t have access to internet connectivity. It is about empowering everyone, everywhere – young and old, men, women and children, patients, community health workers, Doctors to use digital tools like phone apps and wearables for better prevention, diagnosis and care of heart-related conditions.

Not all hearts are equal. But they should be... and digital health can help to redress the balance.

Tele health has a huge role to play as we continue to USE HEART TO BEAT CVD.

Consequences : Missing medical appointments, Lack of contact with family and friends, Reduced physical exercise

Digital networks have the power to connect patients with families, friends, other patients, Doctors and Carers. No one should have to feel alone, pandemic or not, so let us use technology to overcome isolation and gaps in care.

Risk factors that lead to heart disease and stroke include:

High Blood Pressure, Cholesterol and Glucose Levels	Smoking, Tobacco use	Unhealthy diet	Obesity
Harmful use of Alcohol	Living under Stress	Physical inactivity	

World Heart Day is a very crucial global awareness platform of World Heart Federation for CVD that people can use to raise awareness and encourage individuals, families, communities and Governments to take action now. Together everybody has the power to reduce the premature deaths from and burden of CVD, helping people everywhere to live longer, better and heart-healthy lives.

Few Fascinating Facts about the Heart :

- The heart of a healthy person beats about 1,15,000 times every day.
- The heart pumps blood to all of the 75 trillion cells of the body.
- Only the Cornea of the eye doesn’t receive blood supply.
- In fact, the heart rate drops while asleep.
- Strangely enough, on average, women’s hearts beat about 10% faster than men’s.

Heart is the size of your fist and the strongest muscle in the body. It started beating about three weeks after one is conceived. If you live to be 70, it will have beaten two and a half billion times.

The system can be weakened from a pre-existing heart condition including Hypertension or High Blood Cholesterol or Diabetes.

DIFFERENT TYPES OF CVD :

HEART DISEASE	HEART ATTACK	STROKE
Coronary Heart Disease (CHD) or Ischemic Heart Disease (IHD) is the most common type of heart disease. It refers to heart problems caused by narrowed coronary arteries that supply blood to the heart muscle. For some people, the first sign of CHD is a heart attack.	A heart attack, or myocardial infarction, occurs when something usually a blood clot, cuts off the flow of blood to the Heart. Without oxygen and nutrients, the heart muscle begins to die. A heart attack may not be fatal, especially if one receives immediate medical attention and treatment, but it can still cause lasting damage to the heart.	A stroke occurs when the blood supply to the brain is interrupted, causing the brain to lose its vital supply of Oxygen and nutrients. Stroke can either be caused by a blood clot in the brain artery or when a blood vessel in the brain bursts and bleeds, damaging the brain tissue.

Symptoms of cardiovascular disease vary based on what condition one has and can include:

Chest pain, chest tightness, chest pressure and chest discomfort	Pain, weakness or numbness in your legs and/or arms	Pain or discomfort in the arms, neck, shoulder, jaw and back	Shortness of breath	Dry/persistent cough
Easily tiring during exercise or activity	Changes in your heart rhythm	Very fast or slow heartbeat, palpitations or fluttering in your chest	Dizziness, light-headedness or fainting	Weakness or fatigue
Skin rashes or unusual spots	Fever	Swelling of the hands, legs, ankles or feet		

The symptoms of heart attack in men are intense chest pain, pain in the left arm or jaw and difficulty in breathing. Women may have some of the same symptoms, but the pain may be more diffuse and inconsistent spreading to the shoulders, neck, arms, abdomen and back or indigestion or unexplained anxiety, nausea, dizziness, palpitations and cold sweat and may be preceded by unexplained fatigue. Women also tend to have more severe first heart attacks which frequently lead to death as compared to men.

If one experience chest pain, shortness of breath and/or fainting, seek emergency medical care immediately.

Diagnosis: Medical & Family History, Risk Factors, Physical Examination, **Laboratory tests & Imaging Studies:**

Blood test e.g. CBC, Blood Sugar (Fasting and PP), HbA _{1c} , LFT, KFT, Lipid Profile, TSH	Chest X-Ray PA View	Electrocardiogram (ECG/EKG)
Echocardiogram (Echo)	Stress test	Computerized Tomography (CT) scan
Magnetic resonance imaging (MRI) scan	Electron-Beam Computed Tomography (EBCT)	Cardiac Catheterization and Coronary Angiography

PREVENTION : According to the WHO, as many as 80% of all heart attacks and strokes are preventable.

Risk factors, like family history, cannot be modified, while risk factors, like High BP, can be modified through lifestyle interventions and treatment.

These behaviours can lead to raised BP, Diabetes, High Cholesterol, Overweight and Obesity, which can in turn be measured in order to assess an individual's risk of developing CVD.

While individual choices play a part in their behaviours, Govt. and policymakers also play an important role in ensuring people have access to the tools they need to live a healthy life, including clean air, affordable healthy food and well-planned urban spaces that encourage an active lifestyle. Health policies that create environments where healthy choices are available & affordable are essential for motivating people to adopt & sustain healthier lifestyles.

Don't let COVID-19 stop one from attending regular check-ups and never avoid calling the emergency services.

EAT HEALTHY AND BALANCED DIET : Unprocessed, fresh foods, plenty of fruit & vegetables, whole grains, nuts and foods low in saturated fats, sugars and salt. No processed foods. Drink 3 liters of warm water.

EXERCISE REGULARLY : 30 minutes of moderate-intensity physical activity, five days a week. Adults (aged 18-65) and seniors (65+) should aim to do at least 150 minutes of moderate-intensity physical activity, or at least 75 min. of high-intensity physical activity, every week. Children and adolescents should do at least 60 minutes of moderate- to vigorous-intensity physical activity daily.

Use the stairs instead of the lift, get off the bus a few stops earlier and walk the rest of the way. Being active is also a great way to relieve stress and control your weight, which are both risk factors for CVD.

MAINTAIN HEALTHY BODY WEIGHT : Lowering risk of overweight and obesity normally involves reducing the number of calories consumed from fats and sugars, increasing the portion of daily intake of fruit, vegetables, whole grains and nuts. 60 minutes of exercise most days a week will help one maintain a healthy body weight.

AVOID SMOKE-FILLED ENVIRONMENT, EXPOSURE TO SECOND-HAND SMOKE, TOBACCO USE: All forms of tobacco are harmful and there is no safe level of exposure to tobacco. If you are having trouble quitting tobacco, talk to your doctor about developing a tailored plan to suit your needs.

AVOID ALCOHOL : As with tobacco, there is no safe level for drinking alcohol and the detrimental effects of Alcohol far outweigh potential protective benefits. While drinking less may reduce risk of CVD, the ideal situation for health is to not drink at all. Even moderate drinkers notice health benefits when they stop drinking alcohol.

KNOW YOUR FOLLOWING NUMBERS ON REGULAR BASIS :

- **Know your BP:** High blood pressure, or hypertension, is one of the biggest causes of Heart Attack and Stroke. It usually has no symptoms, so it is important to get it regularly checked and, if needed, take the necessary measures to lower it, which may include dietary changes, increased physical activity and medication.
- **Know your cholesterol:** High levels of cholesterol in your blood also increase your risk of CVD. Blood cholesterol can normally be controlled through a healthy diet and, if necessary, by appropriate medication.
- **Know your blood sugar:** High blood sugar, or hyperglycemia, is a common problem for people with Diabetes. Higher blood sugar levels increase one's risk of CVD.

KNOW THE WARNING SIGNS : The sooner the assistance is sought, the greater the chances of full recovery. Learn about Cardio Pulmonary Resuscitation to tide over sudden Cardiac Arrest.

TREATMENT: Lifestyle changes : Diet, Exercise, No Alcohol or tobacco or smoking

Medication: Statins to lower blood cholesterol levels, Low-Dose Aspirin to prevent blood clots, Insulin for diabetes and medication to reduce blood pressure.

Devices : Artificial Cardiac Pacemaker or Automated Implantable Cardioverter-Defibrillator (ICDs) to perform Cardioversion, defibrillation and pacing of Heart.

Medical procedures : Stents, Heart Valve Surgery or Coronary Bypass Surgery

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