

NEWSLETTER

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COVID-19 in Women - William Baker, MD



As of January 13, 2022 there have been 66,789,659 confirmed cases of COVID-19 infection in the United States leading to 873,372 deaths. While men comprise 49.3% of the US population and just 47.4% of cases, men account for 54.9% of deaths. From a United Kingdom study, 24.3% more men than women die from COVID-19 illness. It is postulated that among other possible factors, men generally have a less healthy lifestyle than women and are less likely to seek medical care. As it is clear that the most effective measure protection against serious COVID illness and death, is vaccination it is significant that 62.9% of women are fully vaccinated compared to only 58.7% of men.

Examination of virtually every measure of the societal impact of the COVID-19 pandemic has demonstrated disproportionate impacts on women. Women nurses, nursing assistants and medical assistants have made up the vast majority of the individual handson care provided to ill COVID patients. Similarly, 2 of 3 at home caregivers in the US are women. As such, they are at increased risk of poor physical and mental

health including depression and anxiety as the result of the many stressors associated with the pandemic. Caregiving has been defined as the daily or regular care for children, adults or people with chronic illnesses or disabilities. Mass school closures have regularly made it impossible for women to work outside the home. Women are 3 times more likely than men to work without pay. In the last 2 years, 2 million women left the workforce in order to care for someone at home. This has resulted in 2 years of lost income and retirement benefits with the associated long-term financial impacts.

The website UNWomen catalogues the marked disparity in COVID pandemic effects on women in many areas including 1) Violence against women; 2) Domestic violence; 3) Healthcare workers; 4) Women's healthcare; 5) Economic stress; 6) Unpaid work; 7) Young women and girls; 8) Conflict zones; 9) Migration.

CDC recommended behaviors to help address the adverse consequences of COVID-19 on women include: 1) Protect yourself and others against COVID; 2) Take deep breaths, stretch and meditate; 3) Drink lots of water to stay hydrated; 4) Exercise regularly; 5) Get plenty of sleep; 6) Avoid excessive alcohol and substance abuse; 7) Take time to unwind; 8) Connect with others. Additional CDC guidelines are available specifically regarding caring for children at home during the pandemic.

COVID-19 during Pregnancy - William Baker, MD



Nearly 2 years of research has been required to understand COVID-19 in pregnancy and for science-based guidelines to emerge. From the beginning of the pandemic questions have been posed concerning the impact of COVID illness on the pregnant woman, the fetus and newborn. It has taken time to provide those answers and to analyze the safety and effectiveness of COVID vaccination during pregnancy. A number of scientific studies from the US and other countries has clearly demonstrated that for the pregnant women and her unborn child, COVID infection poses a significant risk of serious illness and death.

The overall risk for COVID-19 infection among pregnant women is low. Pregnant women who become infected are at increased risk of serious illness requiring mechanical ventilation, and death. Black and Hispanic women

are at increased risk of COVID-19 infections and complications. Pregnant women who have diabetes mellitus or other serious medical conditions are at additional risk.

A recent study from Scotland included 87,000 pregnant women followed from December 2020 to October 2021. A significantly increased risk of preterm births and newborn deaths was found pregnant women infected with COVID-19 within 28 days of delivery. The majority of the complications occurred in unvaccinated women. 32% of the women studied were fully vaccinated compared to a 77% vaccination rate in 18-44 year-old women in the general population. 98% pregnant women hospitalized were unvaccinated.

Vaccine safety has been of great concern since vaccines became widely available in January of 2021.

This has especially been the case of vaccination during pregnancy. The CDC has documented a 41% vaccinated rate among pregnant women. The American College of Obstetrics and Gynecology and the CDC recommend vaccination in pregnancy because clinical trials have clearly demonstrated safety and effectiveness at reducing the risk of COVID infection, serious illness and death. In a study of 46,079 pregnant women studied from 5/2020 to 10/2020 there were no cases of preterm birth or underweight newborns.

It is clear that infection during pregnancy may be serious and even life threatening for pregnant women and the unborn child. Vaccination dramatically reduces this risk. COVID-19 vaccination is safe and effective during pregnancy and advised for all women, regardless of pregnancy status.

Symptomatic Exercise? What's to be Expected and When to be Concerned. - Kelsey Reason, CEP

When I instruct my patients in Cardiac Rehabilitation who are just beginning an exercise program, I will explain to them that a bit of shortness of breath is not necessarily concerning but is rather an expected side effect of aerobic exercise. You may have experienced this phenomenon yourself when taking a brisk walk around the block, chasing children and/or grandchildren around the house, or doing yardwork. When we start to move aerobically, and our heart rate starts to increase, we need more oxygen to compensate for the added workload on our body. Thus, we start to breathe a little heavier and some shortness of breath occurs in addition to perhaps a noticeable pounding in our chest due to our increased heart rate. These are all expected symptoms, including even some muscle aches or soreness post-exercise from the stress placed on our body during the workout. The benefits to these temporary disruptions in comfort and minor ailments is a healthier cardiovascular system, strengthened skeletal system, and improved mental health over the long term.

It is important to know what is to be expected with aerobic exercise but since you may encounter a situation while exercising that seems abnormal and it's good to be prepared for what to in the event of something concerning. Regarding shortness of breath, on a scale of 1-10 [see diagram 1], you should not report a shortness of breath greater than 4. If you experience excessive shortness of breath (5 or greater on the scale), stop exercising and rest while taking deep breaths in through your nose and



out through your mouth. If you have been diagnosed with asthma or other breathing difficulty you may use your prescribed inhaler or treatment as necessary. When determining a safe heart rate range for exercise, you should strive for 60-80% of your maximum heart rate in beats per minute which can be calculated by subtracting your age from 220. Checking your heart rate while exercising to ensure you do not exceed the recommended rate is a good preventative strategy [see diagram 2] and can be estimated quickly by counting the number of beats in six seconds and adding a zero to the end (ex. You count 8 beats, so your estimated heart rate is 80 beats per minute). Muscle soreness is typically something that presents itself post exercise and can be alleviated by a brief warm up and stretching of the muscles often, however if you feel any sharp or sudden muscle pains while exercising, stop immediately to assess the situation. Look for any swelling or bruising and

apply ice to the affected area for 10 minutes several times per day until the injury is resolved. If your injury does not go away or gets worse contact your doctor. If you become dizzy or lightheaded with exercise, stop and sit down. If you are able, check your blood pressure and/or blood sugar if you are diabetic and assess your hydration status. Drink water or eat a snack to remedy deficits in these areas if necessary.

Because women can experience differing symptoms than their male counterparts, there are a few additional exercise concerns that women should be aware of. For a young woman who is still of menstruating age, exercise can sometimes cause light spotting which is normal. Unexpected heavy bleeding is not normal and you should contact your doctor if this occurs. If you experience unusual fatigue, nauseousness, or pain stop exercising and rest until resolved. You may just need to call it a day if your symptoms do not resolve

with rest or contact your doctor if you are still concerned with prolonged symptoms. Women often stop exercising when symptoms of menopause begin to present, however continuing to exercise during this time and beyond actually has many health benefits for the aging woman. Regular aerobic exercise can stave off weight gain (which can reduce the risk of associated health issues like heart disease and diabetes), increase bone strength that typically declines during menopause, and improve your mood. Don't let those menopause symptoms, or symptoms of exercise in general,

Diagram 1

Shortness of Breath Modified Borg Dyspnea Scale	
0	Nothing at all
0.5	Very, very slight (just noticeable)
1	Very slight
2	Slight
3	Moderate
4	Somewhat Severe
5	Severe
6	
7	Very Severe
8	
9	Very, very severe (almost maximal)
10	Maximal
*TeleRehab™ Advantage Cardiopulmonary Monitoring System *NICORE™ External Counterpulsation (ECP) Therapy System	

ROZINN™ Diagnostic Cardiology Suite (Holter, Event, ABP)

ScottCare

scare you off from putting in a bit of effort on the forefront to reap the benefits of a healthier lifestyle in general.

Diagram 2



Pandemic, Epidemic or Endemic? - William Baker, MD



Understanding the difference between these terms allows us to better comprehend the information we receive from scientific presentations and general news sources.

Pandemic

A pandemic is declared when a disease's growth is exponential. This means that growth rate of the disease skyrockets and covers a wide area, crossing international borders and is out of control. This wide geographical reach leads to large-scale social disruption, economic loss and general hardship. Notable pandemics have included: 1) The Black Death

(1346-1353), also known as the Bubonic Plague, was caused by the bacteria Yersinia pestis and caused an estimated 25 million deaths; 2) The American Plagues (16th century), primarily smallpox but also measles and sexuallytransmitted disease, contributed to the collapse of the Aztec and Inca civilizations and is estimated to have caused the death of 90% of the indigenous population of the Western Hemisphere; 3) Influenza - 1889 to 1890 Flu Pandemic caused the death of 1 million people; The Spanish Flu of 1918 to 1920 killed 675,000 in the US and 50 million world-wide; 4) AIDS Pandemic and Epidemic has

claimed 35 million lives to date; 5) COVID-19, starting in December of 2019, has killed 882,000 in the US and 5.65 million world-wide, to date.

Epidemic

An epidemic is an unexpected increase in the number of cases of a disease in a specific geographical area. Yellow fever, smallpox, measles and polio are examples in American history. Epidemic diseases do not have to be contagious and include West Nile fever and obesity. Although an epidemic is large, it is generally contained or expected in its spread.

Endemic

An endemic disease is an outbreak that is consistently present but limited to a particular region, making the disease spread and rate predictable. Malaria is an example of a disease endemic to certain countries and regions.

Columbia University – Global Health, Infectious Disease, Public Health. February 19, 2021.

Treatment for non-hospitalized patients with COVID-19 - Effective against the Omicron variant

- William Baker, MD



Paxlovid

Nirmatrelvir 300 mg plus Ritonivir 100mg orally twice daily for 5 days

Inhibits COVID-19 viral replication – high efficacy – 88% effective

Indicated in patients with mild to moderate COVID-19 in adults and children (age 12 or older at least 88 lbs), with positive COVID test and at high risk of progression to severe COVID requiring hospitalization or death

Administer as soon as possible and within 5 days of symptom onset Numerous drug interactions must be considered No indication of adverse effects in pregnancy and not secreted in breast milk but studies are limited

Xevudy

Sotrovimub 500 mg intravenous infusion

Antibodies which adhere

to the COVID spike protein and prevent the virus from entering the cell – high efficacy – 85% effective

Indicated in patients taking a medication that interacts with Paxlovid and/or severe COVID-19 in adults and children (age 12 or older at least 88 lbs), with positive COVID test who do not require oxygen and are at high risk of progression to severe COVID requiring hospitalization or death Patient able to come to a health care facility

Administer as soon as possible and within 7 days of symptom onset

Veklury

Remdesivir 200 mg intravenous day 1 and 100 mg days 2 and 3

Inhibits COVID-19 viral replication and high efficacy -87% effective

Indicated in adults and children

(age 12 or older at east 88 lbs, with positive COVID test and at high risk of progression to severe COVID requiring hospitalization or death and also in hospitalized children less than 12 and at high risk of death

Patient in health care facility or through home infusion services

Administer as soon as possible and within 7 days of symptoms onset

Legverio

Molnupiravir 800 mg orally twice daily for 5 days

Inhibits COVID-19 viral replication but low efficacy – 30% effective

Adult patients not able to be treated with one of the options above

Not in pregnancy or in children and concern regarding potential for genetic mutations

Administer as soon as possible and within 5 days of symptom onset

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Bakersfield Heart Hospital's Women's Heart Center

- Bakersfield Heart Hospital



Heart disease is still the leading cause of death for women in the United States, killing more nearly 400,000 women —or about 1 in every 5 female deaths, according to the latest figures from the Center for Disease Control and Prevention. Yet only 56 percent of women are aware of that fact.

That's partly because some heart attack symptoms experienced by women — shortness of breath, nausea or vomiting, and back or jaw pain (which differ from those experienced by men) are often excused as stress, flu or other ailments. For many women, heart disease is a silent threat that goes undiagnosed until symptoms of a sudden heart attack, heart failure or stroke surface.

This is why, in 2013, Bakersfield Heart Hospital (BHH) created the Women's Heart Center (WHC) to provide education, information and preventive screening services to help women understand their risk for heart disease and take steps to improve their heart health. The goal was to make

it affordable (\$25, which it still costs today) so more women would take advantage of the program. The WHC was the first of its kind in Kern County then, and remains the only program in the community today where you actually have an in-person visit with a cardiac nurse.

In 2015, BHH began referring those patients who met criteria to Central Cardiology Medical Center for a Calcium Score. To date, this MRI scan that detects calcified plaque in the arteries has led to hundreds of less invasive procedures and 15 open heart bypass procedures.

In 2017, the women who had gone through the WHC urged BHH to see their husbands, so the Center began providing the same services to men.

Cynthia Burt, the nurse program coordinator, is key to the success of this program. Prior to the Women's Heart Center, she worked as an ICU nurse caring for patients following open heart

surgery. When the Center was being developed, Cynthia was approached to see if she had an interest in the program. Wanting to be an advocate for prevention rather than post-operative care, she happily accepted the position.

The WHC has not only been credited for identifying heart disease risk and patients with cardiovascular disease. Many people who go through the WHC haven't seen a primary care provider in years. Through the program, numerous have been identified as having high blood diabetes pressure, and woman referred for a calcium score found she had cancer and was luckily able to seek timely treatment.

As of today, the WHC has screened over 5000 women and men. Nine years after starting the program, it continues to be booked out two months in advance with new patients and those repeating the screening to see if they have successfully lowered their risk factors for cardiovascular disease.



Heart disease is 80% preventable and the work performed in the Women's Heart Center has saved countless lives in our community. For more information about the Women's Heart Center, scan the QR code with your cell phone camera or call 661-852-6200 to schedule an appointment.

Centric Health

Centric Health is a multispecialty medical group comprised of many of the most outstanding medical professionals and medical groups in Bakersfield dedicated to providing the highest quality of medical care in a rapidly changing health care landscape. Centric Health was developed to enable physicians to do their best work and to assure access to high quality care for residents of our community. Centric Health includes a broad spectrum of medical specialties and services designed to meet the many needs of patients.

The Physicians and healthcare professionals at Centric Health Medical Offices offer an array of services ranging from Cardiology, Vascular, Primary Care, Endocrinology, Pulmonology, Neurosurgical Spine Surgery, Urgent Care, and Diagnostic Imaging.

- Central Cardiology Medical Center
- Preferred Family Care
- Sillect Medical Centers
- Kern Endocrine Center
- WF Baker MD and Associates
- J. Foster Campbell, MD
- Golden Valley Medical Associates
- Harjeet Singh, MD
- Susan Hall, MD
- Dr. Ian Armstrong Spine Specialist
- Dr. Ashraf Pulmonology
- Clinica Del Valle
- Golden State Hospitalists
- Centric Health Imaging
- Centric Urgent Care

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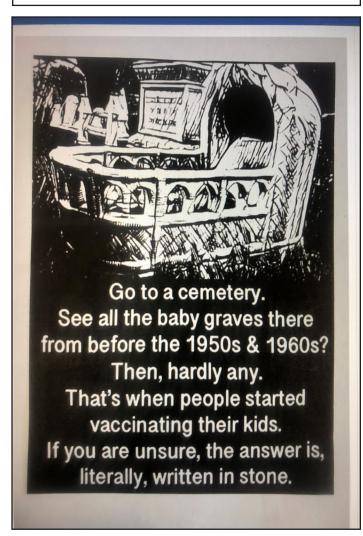


"If you ignore everyone in the room when you're on Facebook, why is it called social media?"



"I don't wake up at night to check my e-mail.

I automatically have it forwarded to the people in my dreams and they read it to me."





You must not rely on the information in these materials as an alternative to medical advice from an appropriately qualified professional. If you have any specific questions about any medical matter you should consult an appropriately qualified professional. If you think you may be suffering from any medical condition you should seek immediate medical attention. You should never delay seeking medical advice, disregard medical advice, or discontinue medical treatment because of information in these materials.