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Sexual Health Concerns in Patients With Cardiovascular Disease

Lindsey Rosman, MA; John M. Cahill, MD; Susan L. McCammon, PhD; Samuel F. Sears, PhD

Sexual health concerns are common in patients with all types of cardiac disease, including patients with coronary artery disease, patients after a heart attack, those with implantable cardioverter-defibrillators, and patients with chronic heart failure.¹⁻⁵ In fact, approximately 60% to 90% of patients with chronic heart failure acknowledge sexual dysfunction.² Heart patients often experience changes in their ability to engage in and enjoy a broad range of sexual activities, which can result in less frequent and less satisfying sexual experiences. Sexual health is an important quality-of-life concern for patients and their partners, and healthcare providers can often help if they are aware of the problem.

For men, the most frequently reported sexual problems include reduced sexual desire and difficulty achieving and maintaining an erection.² Cardiovascular disease and its treatment may also affect a man's ability to achieve orgasm. Women are more likely to experience decreased sexual desire, problems with orgasm,

vaginal dryness, and pain during intercourse.¹ See Table 1 for a list of common sexual problems in cardiac patients.

Unfortunately, sexual problems are often not reported and go untreated, and they may negatively affect your physical recovery, emotional well-being, and intimate partner relationships. Moreover, studies suggest that a majority of patients and their partners have questions or concerns about their sexual health.⁶ Often, these concerns go unexpressed and remain untreated during routine cardiac care. Therefore, the purpose of this patient page is to describe common sexual difficulties, to identify strategies to improve your sexual health, to discuss steps to effectively communicate concerns to healthcare providers and partners, and to provide answers to frequently asked questions about sexual health concerns.

Factors That Contribute to Sexual Problems in Cardiac Patients

Cardiovascular disease increases your risk for developing sexual

problems. Cardiovascular disease and its treatments change the way blood circulates throughout the body and may reduce the amount of blood supplied by the heart to distant areas of your body, including the genital region. Reduced blood flow can lead to erectile dysfunction in men and sexual arousal difficulties in women. Symptoms of cardiovascular disease such as chest pain, shortness of breath, and fatigue may also interfere with sexual performance and enjoyment of sexual activities. Additional factors such as having multiple chronic health conditions (ie, diabetes, COPD, cancer) and side effects of certain medications may also disrupt sexual activity.

Additional Factors That Can Disrupt Sexual Health

- Emotional distress
- Fear that it is not safe to be sexually active
- Health behaviors
- Relationship problems

The information contained in this *Circulation* Cardiology Patient Page is not a substitute for medical advice, and the American Heart Association recommends consultation with your doctor or healthcare professional.

From the Departments of Psychology (L.R., S.L.M., S.F.S.) and Cardiovascular Sciences (J.M.C., S.F.S.), East Carolina University, Greenville, NC.

Correspondence to Samuel F. Sears, PhD, East Carolina University Department of Psychology, 215 Rawl Hall, Greenville, NC 27858. E-mail sears@ecu.edu (*Circulation*. 2014;129:e313-e316.)

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Table 1. Common Sexual Problems

Loss of interest or desire for sex
Problems achieving or maintaining an erection
Difficulty achieving orgasm
Problems with ejaculation
Anxiety about sexual performance
Pain during intercourse
Vaginal dryness or difficulty becoming aroused

Emotional distress, depression, and anxiety are common in patients coping with cardiovascular disease and are associated with increased risk for sexual problems.⁷ In addition, concerns about whether sexual activity is safe after a cardiac event can lead to avoidance of physical affection and intimacy. Relationship problems and health behaviors such as smoking, inadequate sleep, alcohol abuse, and physical inactivity can also interfere with sexual performance and lead to sexual problems.^{8,9}

Table 2. Health Behaviors That Interfere With Sexual Activity and Strategies for Change

Health Behavior and Its Effect on Sexual Activity	Suggested Strategies
Stress Affects your physical health, relationships, and hormones, which can reduce your sexual desire and functioning.	Learn and implement different strategies to reduce your stress and to learn new ways to relax as a couple. Try taking a deep breath, going for a walk, or doing a favorite activity. Free online resources are available at www.calm.com .
Smoking Affects your heart, health, fertility, and skin complexion and can cause erectile dysfunction.	Talk to your doctor about the benefits of quitting. Free online resources and smartphone applications are available at www.smokefree.gov .
Sleep problems Lack of sleep affects your health, mood, energy, and hormones and can lead to sexual problems.	Go to sleep and wake up at the same time every day. Avoid caffeine and nicotine. Create a good sleeping environment by removing televisions or computers from the bedroom.
Alcohol Causes dehydration and reduced blood flow in the body; increases the risk for erectile dysfunction in men and lubrication problems in women.	Talk to your doctor about the benefits and risks of consuming alcohol. If you drink alcohol, do so in moderation: men, 1–2 drinks per day; women, 1 drink per day.
Diet Foods high in salt and fat increase blood pressure, which can restrict blood flow to the body, resulting in reduced sexual arousal and erectile dysfunction.	Eat foods in moderation. Follow a low-fat, low-salt diet. Ask your doctors about nutritional counseling. For more information, recipes, and suggestions, go to www.heart.org and click on “Getting Healthy.”
Physical inactivity Lack of regular physical activity is associated with erectile dysfunction, body image concerns, reduced sexual desire, cardiac problems, obesity, fatigue, and stress.	Engage in regular physical activity. It will improve your mood, body image, stamina, sex drive, and sexual functioning. Set small manageable goals to increase daily activity. Remember, sex is a form of exercise.

Strategies to Improve Your Sexual Health

Communication With Healthcare Providers

Research has shown that 61% of patients want to discuss sexual health concerns with their medical providers,² yet fewer than 15% have had those discussions with their physician.⁸ Patients and their partners can find it difficult to discuss issues related to sex and intimacy. However, your healthcare providers view sexuality as an important part of your life and are used to talking about these issues. You may need to initiate this conversation with your cardiologist or another member of your medical team.

How to Start the Discussion With Providers

- “I read somewhere that my heart condition could get in the way of intimacy.”

- “I want to be intimate with my partner, but I am worried that it will make my heart beat too fast.”
- “My partner is concerned that sex is not safe for my heart.”

Communication With Your Partner About Sexual Concerns

Many patients are fearful or anxious about resuming sex or have concerns about sexual performance after a cardiac event. Physical changes in appearance, surgical scars, and body image concerns are also common and may interfere with sexual activity. For patients in a partnered relationship, open and honest communication with your partner about your concerns is an essential first step toward resuming intimacy. Understanding each other’s sexual interests and concerns will allow you and your partner to develop a plan of action that meets both of your needs for intimacy, emotional connectedness, and physical affection.

Returning to intimacy can be a slow process, but you need to start somewhere. Approach this problem as a couple, and try to keep an open mind to new ideas and experiences. Start by spending time with your partner in ways that focus on physical affection without the expectation of sex. This will help create a romantic mood that leads to a greater sense of emotional closeness and relationship satisfaction. If your partner is anxious about resuming sex, listen to his or her concerns and start off slowly by just holding hands, cuddling, or kissing. As you and your partner become increasingly comfortable with resuming sexual activity, you can gradually incorporate more intimate activities into your relationship.

Seeking new romantic relationships after a cardiac event can be particularly stressful for patients who are less than 50 years old or single. Fear or anxiety about dating, initiating sex with a new partner, and sexual performance concerns are common. Before initiating a new sexual relationship, it is important for you to have an open and honest conversation with your



Table 3. Treatment Options

Treatment	Advantages	Disadvantages
Medications (phosphodiesterase type 5 inhibitors)	Easy to use. Works quickly (30 to 60 minutes). Short-term (sildenafil) and longer-acting (tadalafil) options.	Not advised for patients taking nitrates. Delayed or reduced effects if taken with alcohol or a fatty meal.
Sexual aids (devices and products for men and women)	Can be used alone or with a partner. Widely available (online or in stores).	Concern about trying something new. Fear that your partner may not want to use sexual aids during intimacy.
Vaginal moisturizers and lubricants	Vaginal moisturizers: Used regularly to supply moisture to the lining of the vagina. Do not require a prescription. Available in gel, liquid, or cream (Replens, Luvena, Hyalo GYN). Vaginal lubricants: Used as needed to reduce friction during sexual activity and to make sex more comfortable. Available in water-based (K-Y and Astroglide) and silicone-based (Wet Naturals Silky Supreme) formulas.	Not all moisturizers and lubricants work for all women. You may need to try several before you find the right one for you. Silicone-based lubricants last longer but can be more expensive and do not wash away as well as water-based lubricants. Some women can be sensitive to ingredients (parabens) or perfumes found in certain formulas. Test a small amount on your inner thigh before general application.
Couples or individual therapy	Can help with communication, body image, and individual or couples' concerns. Addresses behaviors, emotions, and distress that can cause sexual difficulties.	Can take 1–2 sessions with a psychologist or counselor. Will not treat medical causes of sexual dysfunction (reduced blood flow caused by heart disease).

partner about any potential challenges or sexual concerns. For example, if you have physical limitations, you should discuss them with your partner, and together you should develop a list of possible solutions or positions that maximize performance and promote mutual satisfaction with the sexual encounter.

Table 4. Frequently Asked Questions and Answers

Question	Answer
How does my heart change during sex?	Your heart rate, blood pressure, and respiratory rate increases slightly during sex. For example, at its peak (orgasm), your heart rate can reach 102–127 beats per minute. This is normal and safe. Changes in your heart rate and blood pressure are minimal across sexual positions.
Is sexual activity safe for my heart?	For most patients, sexual activity is safe and is comparable to mild to moderate physical activity (ie, climbing 2 flights of stairs or walking briskly). ⁸ Patients with advanced disease or unstable cardiac symptoms (eg, chest pain or discomfort) should talk to their doctor before engaging in sexual activity.
My partner and I have not had sex in a long time. What steps do we need to take to resume intimacy?	Discuss each other's sexual needs and decide if you and your partner are ready to resume sex. Give yourself a lot of time to "get in the mood." Feeling relaxed is important for sexual comfort and pleasure. Start slow and tell your partner what feels good and what does not.
What is my risk of experiencing a cardiac event during sex?	Your risk of experiencing a cardiac event during sex is extremely low. Fewer than 1% of all heart attacks occur during sexual activity. You have a greater chance of experiencing a shark bite (1 in 60 453) or being hit by lightning (1 in 79 746) than having a heart attack during sex.
My partner has an implantable cardioverter-defibrillator. Can sexual activity cause the device to shock him/her? And if my partner receives a shock during sex, will it hurt me?	No, sexual activity will not cause your device to deliver a shock. If you receive a shock during sex, it will not hurt your partner in any way or cause pain.
My partner worries that sex could harm my heart. How do I reassure him/her that it is safe to resume sex?	Couples often worry about when and how to resume intimacy after a cardiac event. Talk to your doctor about your readiness to return to sexual activity. Bring your partner to that appointment and ask questions. This will help you and your partner feel comfortable and confident about resuming intimacy.
Are there certain sexual positions or techniques my partner and I should avoid?	No. However, certain positions or practices may be more comfortable, depending on your tolerance for exercise and physical limitations. Extra support with pillows can improve comfort. Erotic devices are also generally safe for cardiac patients and patients with implantable cardioverter-defibrillators.
Intercourse is not possible for my partner and me right now because of his/her health limitations. Are there other ways to be physically intimate?	Sexual expression includes a broad range of alternative positions and practices and is not limited to intercourse. Your goal is to connect emotionally and physically with your partner. Some couples achieve this by holding hands, kissing, or cuddling. Communicate your needs to your partner and identify activities that are mutually satisfying.

Manage Health Behaviors That Interfere With Sexual Activity

Table 2 is a list of common health behaviors that interfere with sexual activity and suggested strategies to improve your sexual health.

Treatment Options

A number of treatment options are available if you or your partner experiences sexual difficulties as a result of cardiovascular disease. Table 3 describes the advantages and disadvantages of each treatment. Talk to your doctors about your sexual health concerns. You may want to bring your partner to that appointment for emotional support or to provide additional information to your doctors if needed. Your heart condition, health history, and medications may affect which treatments can be prescribed.

Your cardiologist may refer you to a doctor who specializes in treatment for sexual dysfunction. Sexual problems can also be a symptom of emotional distress or depression. These symptoms are common and can often be treated with 2 to 3 counseling sessions with a psychologist or mental health provider. Long-term struggles with depression might require additional treatment. Keep in mind that you may need to try 1 or more strategies before you find what works best for you and your partner.

Conclusions

The reality of heart disease is that it can disrupt your quality of life and daily activities in a number of ways, including your sex life. Sexuality and intimacy concerns are common and important to patients with cardiovascular disease and their partners. If you or your partner experiences sexual difficulties and are interested in treatment, talk to your healthcare providers about your sexual health concerns. Having this discussion with your providers to address frequently asked questions (Table 4) will allow you to receive accurate information, suggestions, or professional recommendations to help you overcome these issues.

Disclosures

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