

## Integrative review

# Sexual dysfunction common in people with coronary heart disease, but few cardiovascular changes actually occur during sexual activity

10.1136/eb-2014-101787

Elaine E Steinke

School of Nursing, Wichita State University, Wichita, Kansas, USA

Correspondence to: Dr Elaine Steinke, School of Nursing, Wichita State University, 1845 Fairmount, Wichita, KS 67260-0041, USA; elaine.steinke@wichita.edu

Commentary on: Bispo GS, de Lima Lopes J, de Barros AL. Cardiovascular changes resulting from sexual activity and sexual dysfunction after myocardial infarction: integrative review. *J Clin Nurs* 2013;22:3522–31.

## Implications for practice and research

- Risk of myocardial infarction (MI) or arrhythmia with sexual activity is low, despite anxieties expressed by patients.
- Sexual counselling is needed to assist patients who wish to be sexually active and maintain the quality of their sex life.
- Further research is needed to identify the most efficacious sexual counselling interventions.

## Context

Patients with post-MI often report physical and psychological concerns related to sexual activity.<sup>1</sup> Anxiety stems from fear of MI or presumed risks, while physical concerns often result from sexual problems, sexual dysfunction and changes in sexual activity.<sup>1–3</sup> Bispo and colleagues conducted an evidence-based review that analysed the risks associated with post-MI sexual activity and sexual dysfunction.

## Methods

This integrative literature review was conducted using LILACS, MEDLINE and PubMed databases. Inclusion criteria were: no restriction by type of study; published in Portuguese, Spanish or English language between 2000 and 2011; and topics related to MI, cardiovascular changes or sexual dysfunction. Search terms included 'myocardial infarction', 'sexual behavior', 'sexual dysfunction' and 'psychological'. One hundred and sixty-five papers were identified. Each one was examined in relation to its identification (authors, authors' background, year, database and periodical) and paper characteristics (title, objective, study design, results and conclusions). Twenty papers were analysed for this review.

## Findings

Of the 20 papers, 8 were related to cardiovascular risks and sexual activity, 10 were linked to post-MI sexual dysfunction and 2 covered both topics. The findings illustrate that the risk of sexual activity triggering MI or arrhythmia is low, that those less physically active are at greater risk, and that regular exercise is protective. MI was less common among those having sex with a stable sexual partner, when conducted in a familiar, stress-free environment, and when

excessive alcohol or food was not consumed prior to sex. Sexual dysfunction frequently occurred with comorbid conditions, such as diabetes, hypertension and smoking, as well as with certain medications. Fear of another MI or sudden death, anxiety and depression were all psychological contributors.

## Commentary

This review focused on the risks of post-MI sexual activity and sexual dysfunction, both of which are areas of concern for patients and their partners. Reassurance can be provided about the low risk of MI or sudden death coinciding with sexual activity, while increasing physical activity may provide a protective effect and enhancement of sexual function.

Time at risk for ischaemia during sexual activity is quite small compared with overall risk, while MI is believed to occur in <1% of all acute MIs. The absolute risk of 1 h of sexual activity is approximately 1–3/10 000 person-years.<sup>2</sup> Elevated risk occurs primarily in men, during extramarital affairs, with a younger partner and in unfamiliar settings,<sup>2–4</sup> all of which are important considerations in counselling.

Perception of risk can be influenced by a variety of factors. Anxiety, fear and depression are important to assess, and some patients may benefit from sexual therapy. Cardiac rehabilitation provides psychological and physical support for patients; healthcare professionals must proactively refer patients to rehabilitation to assist in the recovery and adjustment of patients in the wake of MI.

A recent scientific statement recommends sexual counselling based on a psychosocial framework, such as cognitive behavioural therapy or social support, as well as partner-inclusive sexual counselling over several meetings.<sup>1</sup> It is the responsibility of the entire healthcare team—physicians, nurses, physical therapists, cardiac rehabilitation staff and others—to integrate sexual counselling as a usual part of practice.

Sexual dysfunction is influenced by a variety of physical, psychological and social factors. Less attention has been centred on psychological factors related to sexual activity and sexual dysfunction. In a recent study, cardiac patients who were not sexually active had higher sexual anxiety and depression, and lower sexual satisfaction and self-efficacy.<sup>5</sup> Therefore, patients who desire to be sexually active may need additional support and counselling to improve sexual self-efficacy.

The strength of this review is that it highlights two important areas: cardiovascular risk linked to sexual activity and cardiovascular risk linked to sexual dysfunction. Of the 20 papers cited by Bispo and colleagues, however, only 9 were clinical studies, while the rest were literature reviews. While literature reviews can be informative, additional well-designed clinical trials are clearly needed to identify the most efficacious sexual counselling interventions.

Overall, though, the message is clear: there is no time like the present to integrate sexual counselling into practice; it is the right thing to do and our patients expect it of us.

Competing interests None.



CrossMark

## References

1. Steinke EE, Jaarsma T, Barnason SA, *et al.* Sexual counseling for individuals with cardiovascular disease and their partners: a consensus document from the American Heart Association and the ESC Council on Cardiovascular Nursing and Allied Health Professionals (CCNAP). *Circulation* 2013;128:2075–96.
2. Levine GN, Steinke EE, Bakaeen FG, *et al.* Sexual activity and cardiovascular disease: a scientific statement from the American Heart Association. *Circulation* 2012;125:1058–72.
3. Nicolai MPJ, Van Bevel J, Somsen GA, *et al.* Erectile dysfunction in the cardiology practice—a patient's perspective. *Am Heart J* 2014;167:178–85.
4. Lange RA, Levine GN. Sexual activity and ischemic heart disease. *Curr Cardiol Rep* 2014;16:445.
5. Steinke EE, Mosack VM, Hill TJ. Sexual self-perception and adjustment in cardiac patients: a psychometric analysis. *J Res Nurs* 2013; 18:191–201.