

**Men and women experience early warning symptoms and signs of an unhealthy heart up to 2 years prior to a heart attack.**

**Summary of Research**

[O'Keefe-McCarthy S, Ready L. Impact of Prodromal Symptoms on Future Adverse Cardiac-Related Events: A Systematic Review. *Journal of Cardiovascular Nursing*. 2016;31(1):E1-E10. doi:10.1097/JCN.0000000000000207.

**Review Questions**

1. Are there early cardiac warning signs (prodromal symptoms) that can predict the risk of a cardiac event (such as a heart attack) and impact treatment of these events?
2. Are these warning symptoms related to pain the patient experiences when admitted to the hospital for an acute event?

**Background**

There are early warning signs, an indication that your heart may be unhealthy, that can happen 3 to 24 months before cardiac events such as heart attack or angina. These include symptoms that come and go with different levels of severity such as mounting anxiety, unusual fatigue, arm pain/discomfort, jaw pain, back and shoulder blade pain, shortness of breath, atypical headaches, sudden dizziness, sleep disturbances, digestion complaints (such as heart burn or nausea or indigestion).

Individuals who experienced heart-related early warning symptoms were more likely to report the same or similar symptoms when they report to the hospital when they have had a heart attack.

Early recognition of these early warning symptoms is imperative for effective targeting, screening, and diagnosis and timely treatment to identify those at risk for future heart-related events.

Pre-emptive recognition of early warning symptoms of development of an unhealthy heart has the potential to reduce unnecessary healthcare burden, influence clinical practice, and improve cardiovascular-related outcomes for people living with heart disease.



### How the review was done

This is a review of 7 studies, which ranged from information about 121 patients, to 2,300 patients. The studies were considered medium to high quality.

- ♥ Participants age ranged from 21 to 97 years, with the average being 68 years.
- ♥ Participants were adult men and women with heart disease (angina or heart attack) who reported early prodromal warning signs

### What the researchers found

All papers found patients reported prodromal anxiety, and unusual fatigue months, weeks, and days before being admitted to hospital for a heart attack. Across all 7 studies, prodromal warning symptoms reported included: increasing anxiety (100%), unusual fatigue (100%), arm pain/discomfort (87%), shortness of breath (87%), gastrointestinal complaints (71%), chest discomfort/pain (57%), jaw pain (43%), back/shoulder blade pain (43%), dizziness (43%), sleep disturbance (29%), headaches (29%).

The review indicated that women reported more warning symptoms than men, with women reporting less chest pain but more fatigue, anxiety, headaches and dizziness. People who experienced chest-related symptoms during a heart attack; they were more likely to have reported early warning signs of chest pain (5 times in women, 3 times in men). This is similar to those with jaw or teeth pain. There is some evidence to suggest that warning symptoms are also related to the amount of chest pain felt during the cardiac event. Prodromal signs were associated with the amount of treatment interventions ordered by doctors.

### Clinical Importance

*Unusual prodromal fatigue is a common warning symptom of developing heart disease that is not well recognised.* Prodromal fatigue is reported in the cardiac literature, but it is difficult to assess as it is mixed in with other symptoms, comorbidities and illnesses. It is common for prodromal fatigue to be so intense that patients cannot complete normal daily activities.

A screening tool is needed, for people who have higher-risk of cardiac events (e.g. due to family history), and clinicians need to provide early risk factor screening and health care education about these symptoms to advise patients about when to seek medical attention.

### Conclusion

Seven studies were summarized on patients with heart disease and their reporting of early symptoms, 3-24 months before their cardiac event (e.g. heart attack). People experiencing these symptoms (such as increasing anxiety, unusual fatigue, arm pain, shortness of breath, and others listed above), especially those with a higher-risk of poor cardiac health, should discuss these symptoms immediately with their doctor or healthcare provider.

