

How a screening tool was created to test for early warning signs of heart disease.

Summary of Research

O'Keefe-McCarthy, S., & Guo, S.-L. (2016). Development of the Prodromal Symptoms-Screening Scale (PS-SS): Preliminary Validity and Reliability. *Canadian Journal of Cardiovascular Nursing*, 26(2), 10–18. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/27382667>

Background

Unrecognized early warning signs (prodromal symptoms) often happen before heart events such as angina or even heart attack. These early warning signs are not recognized by patients or clinicians. The public is becoming more aware of the risks of waiting to seek medical attention for symptoms of heart disease. There is one scale for women which tests symptoms that the patients experience during the heart event, and the early warning signs, but it takes an hour to complete. Therefore, development of a tool to measure early warning signs of heart disease in women and men is needed.

Four studies were done to develop and validate the scale so that we could use it in a sample of patients with heart disease.

How the study was done

A 9- item scale [PS-SS] was created with the prodromal symptoms of unusual aches and pains, dizziness, chest pain, unusual fatigue, sleep disturbances, headaches, shortness of breath, anxiety, and the "other prodromal symptoms" item was added so that patients could report if they felt other things perceived as discomfort.

Methods

One hundred and twenty participants were part of another study, but completed the 9-item scale while in the hospital for a heart attack or angina. They were interviewed by the researcher, who asked about their early warning symptoms, intensity and frequency using the PS-SS.

Results

The participants' average age was 67 for men, and 68 for women. The scale was tested and found to do a consistent job of measuring the early warning signs, and they measured what they were supposed to. Symptoms can also occur even if people do not report chest pain. More research needs to be done about the other prodromal symptoms people can experience, as many report stomach problems, sweating, numbness, heart fluttering and cognitive symptoms, such as memory loss.



Importance

The scale has been rigorously created and tested in clinical practice to screen people at risk for heart attacks or angina. The Cardiac Prodromal Symptoms Screening Scale is reliable and valid to use. Future research will be conducted to re-validate the tool in women and men with heart disease.