Nurse Practitioner Survey on Cardiorespiratory Fitness Testing

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Background

- Cardiorespiratory fitness (CRF) represents an intermediate variable between physical activity behaviors and health outcomes (Lang et al., 2018).
- CRF is defined as the capacity of organs to support energy production during physical activity (Lang et al., 2018).
- There is growing evidence that CRF is a stronger predictor of mortality over traditional cardiovascular risk factors (smoking, hypertension, high cholesterol and type II diabetes) (Ross et al., 2016).
- Although there is strong evidence supporting fitness level testing, CRF is the only major cardiovascular risk factor not routinely assessed in clinical practice (Ross et al., 2016).

Purpose

This study aims to understand the clinicians perspective of integrating submaximal cardiorespiratory fitness testing (step test) into clinical practice.

Methods

Design: Descriptive study using an electronic questionnaire that collects both quantitative and qualitative data
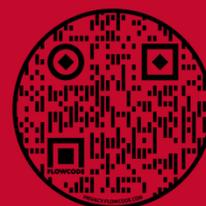
Sample: Convenience sample of Nebraska Licensed Nurse Practitioners

Procedures: Electronic access to the survey will be posted on the Nebraska Nurse Practitioner Website (membership estimated at 350) and will be sent via REDCap email link to approximately 3,500 nurse practitioners through the Health and Human Services email database. Participants will complete the questionnaire and the data will be stored on the secure REDCap database. The survey will be open for approximately 6 weeks.
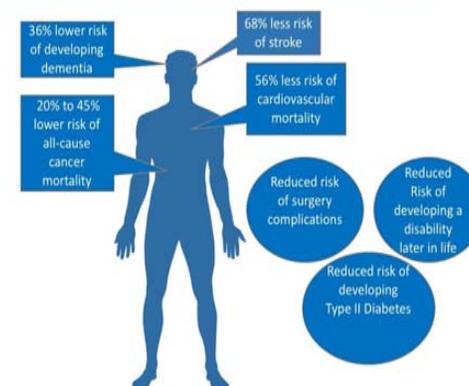
Questionnaire Content:

1. Current use of physical exercise counseling
2. Instructions, including a video on how to perform a simple step test in their own practice
3. A series of questions about their perspective of cardiorespiratory fitness testing
4. A series of demographic questions such as clinical setting, clinic location, years in practice and age

Nurse Practitioner Attitude and Perspective About Cardiorespiratory Fitness Testing in Clinical Practice

HOW TO SCAN: OPEN, AIM & TAP

Open the camera on your phone — Aim it at the Flowcode — Tap the banner that appears

Health Benefits of Cardiorespiratory Fitness Levels

Data used from the American Heart Association

Data Analysis Plan

- Statistical Package for Social Sciences software (SPSS) (v. 25) will be used to analyze continuous and dichotomous variables. Summary statistics will include means and standard deviations or medians and inter-quartile ranges for continuous data; dichotomous data will be presented as a count and percentage.
- Qualitative data will be coded for significant statements and organized into related themes.

Health Care Implications

With the new knowledge generated from this study, we can begin a planned intervention study using fitness testing as a vital sign that benefits both the provider and the patient. Expected benefits from CRF testing include:

- Early detection of low fitness levels
- Opportunity to reevaluate patient fitness levels over time
- Opportunity to provide physical exercise counseling to individuals with low level fitness
- Identification of individuals at an increased risk for cardiovascular disease and all cause mortality
- Opportunity to educate patients on moderate-level exertion using rate of perceived exertion
- Ability to objectively test physical activity level