THE OBJECTIVE PHYSICAL ACTIVITY AND CARDIOVASCULAR HEALTH IN OLDER WOMEN STUDY (OPACH)

Overview of OPACH 2

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STUDY PROTOCOL

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The Objective Physical Activity and Cardiovascular Disease Health in Older Women (OPACH) Study



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NHLBI R01 HL105065 (PI: LaCroix)





OPACH (8,618 Consented)



OPACH (7,048 Enrolled w/ LLS exam)



329 (5%) device not returned 230 data not usable

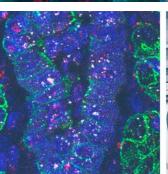


OPACH

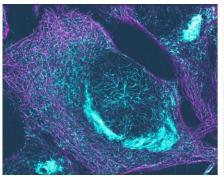
(6,489 Accelerometer analytic cohort)

Toward Evidence-Based Health Care for Women and for All

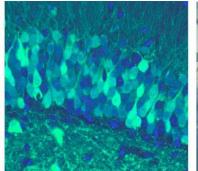
60th Meeting of the NIH Advisory Committee on Research on Women's Health April 9, 2024



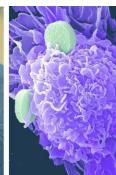
















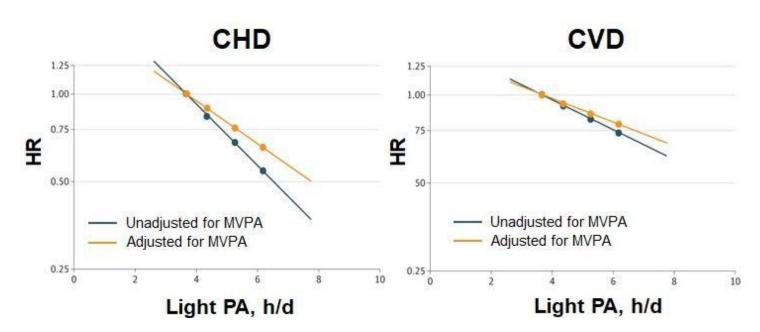


Physical Activity and Health for Older Women

Observational

The WHI Objective PA and Cardiovascular Health Study (OPACH)

Light physical activity associated with reduced risk of CHD or CVD



Interventional

WHI Strong and Healthy Study (WHISH)

Ongoing PAintervention trial for CVD prevention in ~50,000 older women



LaCroix et al. JAMA Netw Open. 2019

Multivariable hazard ratios (95% CI) comparing Quartile 4 (highest) with Quartile 1 of accelerometermeasured behaviors in women ages 63-99

The OPACH Study

Outcome	Sedentary time	Light PA	MVPA	Steps per day
All-cause Mortality	1.83 (1.41, 2.37)	0.57 (0.42, 0.76)	0.46 (0.33, 0.65)	0.51 (0.40, 0.66)
CVD Mortality	2.14 (1.32, 3.46)	0.33 (0.18, 0.59)	0.43 (0.23, 0.81)	0.52 (0.33, 0.81)
CHD incidence	2.65 (1.34, 5.22)	0.58 (0.34, 0.99)	0.54 (0.30, 0.96)	0.61 (0.37, 0.99)
Total CVD incidence	1.69 (1.27, 2.26)	0.78 (0.60, 1.00)	0.69 (0.53, 0.91)	0.74 (0.55, 1.01)
Heart Failure incidence	2.18 (1.46, 3.27)	0.69 (0.48, 0.98)	0.39 (0.25, 0.59)	0.47 (0.30, 0.76)

CVD, cardiovascular disease. CHD, coronary heart disease. PA, physical activity.

Highlights

Among postmenopausal women:

- Increasing physical activity (PA) may be associated with a greater risk of falling.
- Increasing sedentary time may slightly decrease risk of falling.
- Falls risk must be weighed against PA benefits for prevention of chronic diseases.
- Further research is needed to improve safety and support continued PA with aging.