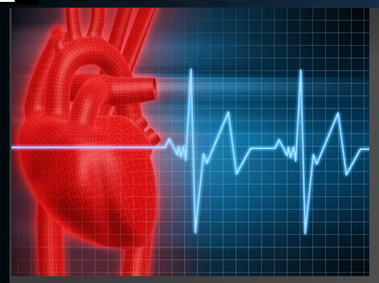


Cardiac Co-morbidities among Individuals Recovering from Psychiatric Disorders

Chantelle Yost, BA, Tina M. Carter, BA, Jessica A. Jonikas, MA, Dennis D. Grey, BA, Peggy Swarbrick, PhD, Judith A. Cook, PhD, & Lisa A. Razzano, PhD, CPRP

UIC National Research & Training Center on Co-Occurring Medical Conditions, Center on Mental Health Services Research & Policy

Background

Prevalence of medical co-morbidities among adults with psychiatric disorders including schizophrenia, bipolar disorder, and major depressive disorder was assessed via community health fairs. It was hypothesized that all co-morbidities would be more prevalent than in the general population, with a specific focus on past medical history of heart diseases (e.g., angina, myocardial infarction [MI], others) as well as screening results for indicators of cardiac illnesses. Relevant factors evaluated included: cholesterol, blood pressure, and smoking. In addition, multiple variables were used in order to assess 10 year risk for heart attack using procedures identified in the Framingham Heart Study.

Methods

Four hundred fifty seven (N=457) community mental health program clients in NJ, MD, IL, and GA attended health fairs run collaboratively by university researchers and peer wellness staff. A variety of common health conditions were assessed, including diabetes; BMI/obesity; cholesterol; blood pressure; smoking; and substance abuse. Multiple variables related to cardiac health were used in combination with demographic factors (i.e., age, gender) to predict proportional risk for heart attack over the next 10 years using tools from the Framingham Heart Study. Level of risk for cardiac illness are described and rates of multiple risks for cardiac illness are documented.

Results

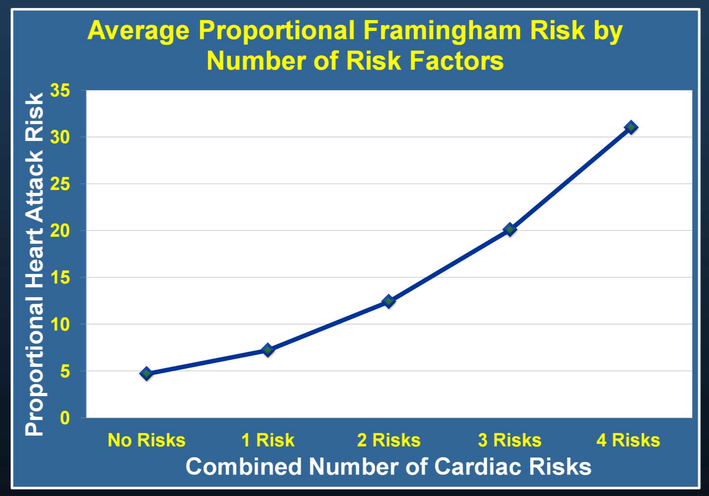
Study Sample Demographics (N=457*)
Gender: Male = 46%; Female = 54%
Race/Ethnicity: Caucasian/White = 49%; African American/Black = 39%; Multi-Racial = 4%; Asian American = 1%; American Indian/Alaska Natives = 1%; Other Racial Background = 6% **Hispanic/Latino:** 7%
Education: No Schooling/Some HS = 20%; High School/GED = 31%; Voc/Technical = 7%; Some College = 26%; Associate's Degree = 5%; BAs = 6%;Some Graduate School = 2%; MAs = 3%; Other Professional = <1%; DK = <1%
Most Recent Diagnosis: Schizophrenia = 44%; Bipolar Disorder = 23%; Depression = 25%; Anxiety Disorder = 4%; Personality Disorders = <1%; Other = 3%; DK = <1%
Working for Pay: 31%
Enrolled in School: 11%
Insurance Sources:** Medicaid = 36%; Medicare = 25%; Dual Eligible = 31%; Private Insurance = 10%; Veteran's AHB = 2%; Other = 4%; **No Insurance = 15%**

*Reflects valid percent/excludes missing data
**Values do not add to 100% as participants could report multiple sources

Health Screening Data	% (N)	Gen. Population
Total Cholesterol		
< 200 mg/dL = Healthy	76% (330)	
200–239 mg/dL = Slightly high	17% (75)	
240+ mg/dl = High	7% (28)	16% Population
Non-reactive Test	4% (18)	
Blood Pressure		
< 120/80 = Normal	37% (168)	
120-139/80-89=Pre-Hypertensive	35% (159)	
140+/90+ = Hypertensive	28% (126)	29% Population
Proportion Smoking	45% (202)	21% Population
A1C		
4% - 5.6% = Balanced	61% (264)	
5.7% – 6.4% = Prediabetes	25% (108)	8% Population (Diabetic)
6.5% or higher = Diabetes	14% (62)	
Non-reactive Test	4% (17)	
Average Framingham Risk Score		
≤ 10% = Low Risk	78% (344)	
11%-19% = Medium Risk	12% (54)	
≥ 20% = High Risk	10% (44)	3% Population

Example Framingham Risk Calculator Data Application	
Sex (validated only for male/female, no transgender/intersex)	MALE
Age (not validated for74)	45 – 49 years
Total Cholesterol (mg/DL)	240 - 279
HDL (mg/DL)	45 - 49
BP (mm Hg) to choose a category, use the highest category.	SBP 130 – 139 or DBP 85 - 89
Pt a diabetic?	Yes
Pt a smoker?	Yes
10 Year CHD Risk	20%
Comparative Risk to Same Age/Sex	11%

www.mdcalc.com/framingham-coronary-heart-disease-risk-score



Summary & Discussion

Results demonstrate substantial cardiac health disparities between those in recovery of severe mental illnesses compared to those in the general population. The proportion of participants screening positive for these risks compared to national surveys of U.S. adult populations were: 7% vs. 16% for high cholesterol; 28% vs. 29% for hypertension; 45% vs. 21% who were smokers; and 10% vs. 3% at high risk for heart attack in the next 10 years. Further, approximately 14% of individuals in recovery vs. 8% of the general population screened for type 2 diabetes, another co-factor contributing to heart health risks. For those identified at the health screening event to be hypertensive, rates between those in psychiatric recovery and the general population, however, were less disparate than for other health risks. Data indicate that 44% of study participants reported being previously diagnosed with hypertension (compared to 29% in the general population); among them, 76% were currently in treatment for the illness. Although a slightly lower rate for hyperlipidemia was found among individuals in recovery through the screening tests, 45% of respondents noted they had been diagnosed in the past with high cholesterol (vs. 16% in the general population); 68% reported being in treatment for hyperlipidemia.

These findings of the higher prevalence of individual cardiac risk factors also are related to overall elevation of risk for heart attack in the next 10 years. Combined cardiac risks from multiple factors were identified, thereby increasing the proportional risk of heart attack over time. Medical health risk screening can help address epidemiologic, education, and prevention goals for this vulnerable population, as well as affect standards of care for providers.

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