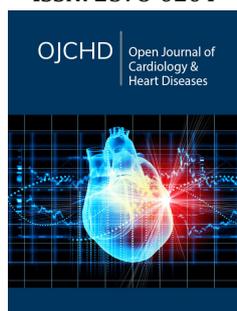


Saving Premature Mortalities Among Young Cohorts with Coronary Heart Diseases Staying Young at Heart, A Systematic Review

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Abstracts

Background: In spite of uncommon incidence of CHD among young age groups, it consists quite challenging concerns for both sick individuals and handling physicians due to the extensive impact of this illness on productive and energetic life patterns of younger age groups patients. Furthermore, the sick group has multiple associated relevant factor styles, medical presentations, and expectation comparing to older patients. The golden factors comprise ideal cardiovascular health e.g. maintaining a normal body mass index (BMI), adhering to a healthy diet, staying physically active, abstaining from smoking, and having blood pressure, total cholesterol, and fasting blood glucose levels in the normal range without need for pharmacologic treatment – seem obvious to most people familiar with CVD.

Objectives: To study premature mortality among Young cohorts and relevant characteristics

Keywords: Premature mortalities; Young cohorts; Coronary health disease

Methodology

Systematic literature review, utilizing key words searching strategies through multiple search engines, identifying 55 original articles, and shortlisting the eligible ones through strict inclusion and exclusion criteria, revising international organization technical reports and interviewing experts in the field. Results: The study revealed that atherosclerosis is still behind the majority of coronary events in young adults, and yet one or more of the traditional CHD risk factors is typically present. Young patients, however, are more likely than older patients to be smokers are, male, obese, and to have a positive family history. Risk factor reduction is thus of major importance in managing young CHD patients [1-5].

Approximately 20% of CHD in young adults, however, is related to non-atherosclerotic factors, such as coronary abnormalities, connective tissue disorders, and autoimmune diseases. Cocaine and other illicit drug use have been increasingly associated with acute myocardial infarction and accelerated atherosclerosis. The differences in etiologist and risk profiles of younger and older CHD patients result in differences. The prevalence figures of CHD in younger subjects are not easy to establish accurately since it is frequently a silent process [6-8]. In an autopsy study of 760 young (age 15 to 34 years) victims of accidents, suicides, or homicides, advanced coronary atheroma was seen in 2 percent of men and no women aged 15 to 19. An advanced lesion was present in 20 and 8 percent of men and women aged 30 to 34, respectively, while 19 and 8 percent, respectively, had a ≥ 40 percent stenosis of the left anterior descending artery. There are still limited data on the frequency of MI in younger subjects. In the Framingham Heart Study, the incidence of an MI over a 10-year follow-up was 12.9/1000 in men 30 to 34 years old and 5.2/1000 in women 35 to 44 years old. The incidence of MI was eight to nine times greater in men and women aged 55 to 64 years. In other studies, 4 to 10 percent of patients with MI were ≤ 40 or 45 years of age [3-5]. In two series of patients with CHD at ≤ 40 years of age, women comprised 5.6 and 11.4 percent of patients [9-11].

Premature coronary heart diseases

In spite of uncommon incidence of CHD among young age groups, it consists quite challenging concerns for both sick individuals and handling physicians due to the extensive impact of this illness on productive and energetic life patterns of younger age groups patients.

Furthermore, the sick group has multiple associated relevant factor styles, medical presentations, and expectation comparing to older patients. Such risk factors must be considered carefully when managing younger age groups presented with Coronary Heart diseases. Almost (4% to 10%) of total heart attacks took place earlier than the age of 45 years, which mainly affects the male gender. Thus, it should be like bell ringing which should not be ignored when it happens among men. Alarming signs & symptoms are only due to being “too young” to get coronary heart disease. Adding to that, and as atherosclerosis may be initiated earlier in youth life, such phenomena are somehow considered as a reminding sign, that early detection and prevention should start as early as possible in youth life before further deterioration. Roughly, estimated figures, revealed that almost (4%) of coronary heart accidents occurred among young adults are usually stimulated by inborn disorders & abnormalities of the coronary artery anatomy.

About (5%) of coronary heart Diseases (CHD) usually related to blood clots events that are originated anywhere and transferred by the bloodstream to other intact coronary arteries, leading to arterial blockage. adding more, in the next five percent, numerous disturbances of the blood clotting mechanisms contributing to increase the risk of clot formation within the circulatory system, including in coronary vessels. A widely extend the range of problems contributed to another 6% of heart events among younger adults. Other problems related to coronary arteries spasm or inflammation retrace abuse of cocaine, amphetamines, or other drugs radiation therapy for chest tumors and chest trauma. Each one of such problems is tragic in its nature. Nevertheless, as it is preventable and common, atherosclerosis is the greatest burden of all. Saying that a fifty-year-old American male has a risk of one-in-two of getting heart disease during the rest of his life, as cardiac risk factors are prevalent among numerous American men. In spite of that, identifying an answer for a question, dose young adults without risk factors beat the odds. The answer is yes. In a Cohort of 3,564 men, (the Framingham Heart Study) which included assessment of, six major risk factors: high total cholesterol, low HDL (“good”) cholesterol, high blood pressure, diabetes, obesity, and smoking and it’s the cardiac impact. A young adult who has not any one of the six risk factors has a significantly declined of risk impact to developing cardiovascular disease about (5%) at the age 95.

On the contrary, a man with two or more risk factors has 69% probability to develop CHD. In addition, based on that, a free of risk man anticipated enjoying extra (11) years of life Comparing to a man who has (2) or even more risk factors. A heart event (CHD) is like the atherosclerosis iceberg tip. Moreover, without effective and earlier interventions, it is likely to progressing the disease to further deteriorations. Literature review of relevant materials revealed that the men develop heart events at an average age of just thirty-six years old; almost 30% of them died for 15 years. More literature showed that men cohorts and women cohorts who were stricken below 40 years old, about (1%) died in the first year, yet (25%) passed in less than (15) years’ time. In recently generated

evidence, the reasons for the sluggish improvements in mortality of coronary heart diseases among younger age groups cohorts remain unclear. So far worsening risk factors may play a role, according to widely generated literature. “Do We Need further recognizing of the mechanisms that taking parts to the worsening risk factor style among females to be able to improve their future morbidity and mortality? “

Addressing such questions shall unlimitedly involve prevention and management for serious conditions such as diabetes, obesity, and many further risk factors in early life interventions. Currently Available data revealed a shortage of powerful coronary heart disease prevention, rather than insufficient or weak treatment efficacy for the disease. Further research work is mandated to identify the answer for, why a number of trends were identified in coronary heart disease mortality in younger women patients, in particular. This will not be an easy “endeavor to achieve more improvements in mortality rates among this patient population group until we shall invest more in prevention strategies for CV risk factors, physicians need to be vigilant when handling younger cohort’s patients at risk for coronary heart diseases before developing of clinical manifests. Similar groups required to be guided to prevention therapies as early as possible [7-13].”

References

1. Jones DML, Hong Y, Labarthe D, Mozaffarian D, Appel LJ, et al. (2010) Defining and setting national goals for cardiovascular health promotion and disease reduction: The American Heart Association’s strategic impact goal through 2020 and beyond. *Circulation* 121(4): 586-613.
2. Wilkins JT, Ning H, Berry J, Zhao L, Dyer AR, et al. (2012) Lifetime risk and years lived free of total cardiovascular disease. *JAMA* 308(17): 1795-1801.
3. Stamler J, Stamler R, Neaton JD, Wentworth D, Daviglius ML, et al. (1999) Low risk-factor profile and long-term cardiovascular and no cardiovascular mortality and life expectancy: Findings for 5 large cohorts of young adult and middle-aged men and women. *JAMA* 282(21): 2012-2018.
4. Stampers MJ, Frank B, Joann EM, Eric BM, Walter WC, et al. (2000) Primary prevention of coronary heart disease in women through diet and lifestyle. *New England Journal of Medicine* 343(1): 16-22.
5. Yang Q, Mary EC, Dana FW, Yuling H, Zhang Z, et al. (2012) Trends in cardiovascular health metrics and associations with all-cause and CVD mortality among US adults. *JAMA* 307(12): 1273-1283.
6. Mozaffarian D, Enjamin EJ, Go AS, Arnett DK, Blaha MJ, et al. (2015) Heart disease and stroke statistics-2015 update: A report from the American heart association. *Circulation* 131(4): e29-e322.
7. Ning H, Darwin RL, Christina MS, Stephen RD, Lifang H, et al. (2015) Status of cardiovascular health in US children up to 11 years of age: The national health and nutrition examination surveys 2003-2010. *Circ Cardiovascular Qual Outcomes* 8(2): 164-171.
8. Amatola H, Juonala M, Laitinen TT, Pahkala K, Vera M, et al. (2014) Prospective relationship of change in ideal cardiovascular health status and arterial stiffness: The cardiovascular risk in young finns study. *J Am Heart Assoc* 3(2): e000532.
9. Pahkala K, Hietalampi H, Laitinen TT, Viikari JS, Ronnemaa T, et al. (2013) Ideal cardiovascular health in adolescence: Effect of lifestyle intervention and association with vascular intima-media thickness and elasticity (the special Turku coronary risk factor intervention project for children [STRIP] study). *Circulation* 127(21): 2088-2096.

10. Clark CJ, Alonso A, Spencer RA, Pencina M, Williams K, et al. (2014) Predicted long-term cardiovascular risk among young adults in the national longitudinal study of adolescent health. *Am J Public Health* 104(12): e108-e115.
11. Roger VL, Go AS, Jones DML, Adams RJ, Berry JD, et al. (2011) Heart disease and stroke statistics-2011 update: A report from the American heart association. *Circulation* 123(4): e18-e209.
12. Arizmendi D, Benito B, Marcos HT, Flores J, Tanguay JF, et al. (2011) Increase in sudden death from coronary artery disease in young adults. *Am Heart J* 161(3): 574-580.
13. Vaccarino V, Shah AJ, Rooks C, Ibeanu J, Nye JA, et al. (2014) Sex differences in mental stress-induced myocardial ischemia in young survivors of acute myocardial infarction. *Psychosom Med* 76(3): 171-180.

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