Sustaining Young Heart, Avoiding Early Ischemia and Reducing Premature Cardiac Mortality and Morbidity

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Abstract

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.

Methodology: Systematic literature review, utilizing key words searching strategies through multiple search engines, Identifying 55 original article, 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.

Keywords: Premature Mortalities; Young Cohorts; Coronary Health Disease

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. 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 [1-5]. In two series of patients with CHD at ≤40 years of age, women comprised 5.6 and 11.4 percent of patients.

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 suck 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 and 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 and 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 disturbance 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 retry 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" [6-13].

Conclusion

Premature CHD event and death is not uncommon, it is increasing trends by modern life patterns, where investing in prevention is still the key factor to make it low profile phenomena, health care systems are mandated to put more efforts at primary prevention at population level, identifying population at high risk and setting up high index of suspension. With sustainable increasing of Coronary heart diseases, morbidities and mortalities worldwide, national cardiovascular, preventive and programs as well as promotions are coming to be necessity in today's world.

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