

Traditional risk factors health and social care essay



**ASSIGN
BUSTER**

Framingham's research to heart, initiated in 1948, have contributed to the recognition of the important causes of RAS. Factors independent adult, so-called risk factors for CVD conventional or traditional, widely researched and incorporated into the risk graph as age, gender, smoking, hypertension, LDL values increased cholesterol, low HDL values Cholesterol and diabetes mellitus. Hereditary factor that is neglected by its independent effect on RAS is vogel³⁷. According to the Framingham Risk Chart Room offers the possibility of assessing the relative and absolute risk of developing RAS in period of 10 years. However, some problems were observed with the application of graph according to Framingham's risk. First, it was developed by the U. S. data and the application of the risk graph for the European population is unclear. Secondly, the group of data that is used for drawing the graph of risk is small. Third, the definition of non-fatal final results differ from many other contemporary research, which makes it difficult to verify grafikut³⁹. Accordingly, it is proposed a new model of risk assessment system based on the SCORE (Systematic Risk Evaluation coronary). SCORE system of risk assessment is built from a variety of data from the European prospective investigation, applies five categorical variables, examines states of northern Europe and southern end result and measure the absolute risk of cardiovascular mortality for the next 10 years. European guidelines recommend SCORE-in as the new model for risk assessment kardiovaskular⁴⁰. Taking into consideration all, risk graphs are considered helpful in the development of risk management plans in clinical experiences.

2. 3. 2. 1. AgeAlthough not subject to be changed, age is the most important among the risk factors for prediction of incident CVD. Absolute risk for CVD increases with age as well as the femrat⁴¹ men. The system of 14 points

Framingham's graph in 7 point scale can only be attributed to age. Moreover, the risk for ischemic cerebrovascular insult doubles for each decade after age 55 vjeç42. However, it is known that the age limit is mainly atherosclerotic synonym for the individual, but not too precise43.

Replacement of age on risk assessment with a more accurate marker, as what mode of non-invasive imaging, predictive accuracy can be improved, but this hypothesis has not been tested adequately. 2. 3. 2. 2.

GenderEpidemiological studies, including the Framingham here's studies have shown that males exposed to the highest risk for CVD compared with women, especially before menopause44. However, this applies only to non-diabetics, with the ball diabetes benefits of gender sensitive female. The reasons for this gender difference in the effect of type 2 diabetes risk remains free SAK entirely clear, but may be related in part to the heavy burden of risk factors, the most harmful effect of hypertension and the dislipidemive aterogjenitetit in women with diabet45. SAK incidence in females appear 10-15 years later than men, but the onset of menopause and quadrupling the level of risk for koronare44 happened. Part of this protection can be ascribed obvious fact that women undergo menopause before the relatively low contents of total cholesterol, LDL cholesterol and triglycerides (TG) and higher values of HDL Kolesterol46. A host of evidence from epidemiological studies have demonstrated the protective effect of hormone replacement therapy on the development of RAS in women after menopause47. Hormone replacement therapy is also associated with undesirable effects, including increasing the value of TG, C reactive protein, factor VII clotting and reduced values of antitrombinës III48. 2. 3. 2. 3.

SmokingSmoking is known for long time as risk factors for CVD. Data from <https://assignbuster.com/traditional-risk-factors-health-and-social-care-essay/>

the Framingham's research found that smoking is a powerful risk factors for IM, even more powerful than the gjoisit⁴⁹ for angina and smokers have 1.8 times higher risk for cerebrovascular inzult (ICV) ⁵⁰. Patofiziologjike effects of smoking are manifold. Smoking causes and kompliancës distensibilitetit reduce the blood vessel and this leads to increased hardness of enës⁵¹ wall. Moreover, smoking is associated with increased values of fibrinogen, increased platelet aggregation, decreased HDL cholesterol values and increase hematokritit⁵². All these indicate that smoking certainly destabilize atherosclerotic plaque rupture and helps the plate and trombozën. A significant proportion of the increased risk for smoking IM leave after smoking stopped for 5 vite⁵³.

2. 3. 2. 4. HypertensionThe importance of increasing blood pressure as systolic and diastolic, as CVD risk factor for both men and women is argued in many research epidemiologjike^{54, 55}. Almost a linear correlation between blood pressure and incidence of CVD is supported by many research arguing that antihypertensive therapy reduces the level of risk for heart attack and stroke in the tru^{56, 57}. However, raising blood pressure and its treatment are more related to the incidence of seizure in the brain than the incidence of SAK^{58, 59}. It has been shown that those with high pressure often have other risk factors (dyslipidemias, insulin resistance split, diabetes mellitus) for CVD than normotensivët^{54, 60}.

2. 3. 2. 5. Total Cholesterol and LDL CholesterolThere is a strong positive correlation and promoted between total cholesterol and LDL cholesterol as well as the degree of risk for CVD. This correlation is present in individuals with symptomatic CVD as well as to individuals with CVD verifikuar^{61, 62}. Data from recent experiments on primary and secondary prevention have documented that statin therapy can safely reduce the 5-year incidence of

<https://assignbuster.com/traditional-risk-factors-health-and-social-care-essay/>

major coronary events, coronary revascularisation and seizure in the brain.

The degree of risk falls to about one fifth per mmol / L LDL cholesterol is reduced, regardless of the initial profile yndrave63. 2. 3. 2. 6. HDL

CholesterolOne of the major risk factors for RAS, which was discovered in the 1950s, is the reduced value of HDL Kolesterolli64. The rate of reduction of risk for every increase of SAK 0. 026 mmol / L of HDL cholesterol is 2% to 3% for men and femra65. Despite a strong epidemiological connection, the mechanism by which HDL cholesterol achieves these effects is still profitable for SAK subject of debate. The main hypothesis of anti-aterogjenik function of HDL cholesterol transport is the opposite of Kolesterolli66. The data flow of cholesterol that is really important is documented in mice, where the presence of ABCA1 in macrophages selective anti-aterogjen is even if the values in plasma lipoproteins remain without ndryshuara67. 2. 3. 2. 7.

Diabetes mellitus (DM)Mortality and serious morbidity is the presence of RAS in patients with diabetes mellitus. This is about the most widespread type of the type 2 diabetes, but also for type 1 diabetes for a long time, especially after the development of diabetic nefropatisë. Diabetics are 3-5 times higher risk for developing high SAK68. Patients treated for diabetes, but no previous IM, have the same degree of risk as patients who have diabetes but have experienced more herët69 IM. The data suggest that increasing DM distort the functioning of many cell types. First, hyperglycemia revoke vazodilatimin endothelium-dependent përqëndrmin reducing nitric oxide. Simultaneously, vazokonstrikcioni added by increased production and angiotenzinës endotelinës-1-II. Secondly, hyperglycemia and activates proteinkinazën C which promotes proliferation of smooth muscle cells in the blood vessel intimën. Third, activation of proteinkinazës C and decrease nitric oxide

production directed by disrupting the function of platelets trombociteve70. 2.

4. Quantification of arteriosclerosisRate risk by Framingham's risk estimates for persons without manifest atherosclerotic disease. For this purpose, the rate applies mainly to primary protection, eg prevention to persons without diagnosed SAK. When RAS is manifest, the degree of risk to happen in the future is high regardless of the values of the risk factors. In this case the degree of risk according to Framingham's not aplikohet43. Greater attention is being paid to non-invasive methods for the identification of sub-clinical atherosclerotic vascular disease and ultimately identify risk factors njohur73 less. 2. 4. 1. Coronary artery angiographyFor the first time it is applied by sonest on 195 974, later coronary angiography is invasive procedures become one of the most commonly applied in cardiovascular medicine. Although angiographic and imaging techniques have been perfected in recent decades, assessment of coronary angiogram to determine the degree of visual diameter narrowing further remained unchanged in most clinical laboratories Catheterization. Coronary angiography is used to verify the presence or non-presence of coronary stenosis, to determine treatment options and to determine the prognosis of patients with symptoms and signs of RAS. Limitations of coronary angiography on the assessment of the significance and extent of the RAS are known mirë75. An angiographic image is a two-dimensional shadow of the dark lumen of the blood vessel which only allows the measurement of residual lumen stenosis or relative. However, atherosclerotic changes in the blood vessel wall correctly and do not reflect real changes in the lumen of the coronary arteres. Research has shown that necrotic SAK is often diffuse and does not contain any segment really shëndoshë76. In the presence of diffuse disease, angiographic

assessment of the degree of stenosis underestimates the importance of the disease. Analysis of coronary angiogram with the aid of computer was developed to overcome the limitations of visual assessment. This is shown superior in terms of accuracy of estimates of coronary stenosis. Neither she nor visual techniques assisted by computer can not be corrected inherent limitations silhouette technique. Coronary intravascular ultrasound (IVUS) that has been developed in recent decades, has many advantages in the evaluation of coronary atherosclerotic disease process. IVUS is based catheterization technique, which provides high-resolution images in real time and enable precise assessment of lumen area, plaque size and composition of koronar77 segment.

2. 4. 2. Ultrasound measurement of intima-media thickness of the carotid arteries

2. 4. 2. 1 Introduction

In recent decades, the measurement of CIMT ultrasonografisë application of high-resolution B-mod came as a method of choice for determining the anatomic extent of atherosclerosis and cardiovascular risk assessment. Ultrasonography in B-mod is a method relatively simple, inexpensive and non-invasive determination of arteriosclerosis. Unlike angjiografia, ultrasonography provides coverage of all stages of atherosclerosis including also early changes in artery wall.

2. 4. 2. 2. Measuring CIMT

Arterial wall consists of three layers: intima, media and Adventicia. Atherosclerosis begins in childhood with the development of fatty ribbon. This first stage of atherosclerosis in histological view is presented as a focal thickening of intimës with an increase of smooth muscle cells and extracellular matrix. During the progress of the disease, changes in artery wall thickening characterized by intimës and media layer (Figure 3).