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EXPOSURE OF ELDERLY RISK FACTORS FOR CARDIOVASCULAR DISEASE

EXPOSIÇÃO DE IDOSOS A FATORES DE RISCO PARA DOENÇAS CARDIOVASCULARES

EXPOSICIÓN DE ANCIANOS A FACTORES DE RIESGO PARA ENFERMEDADES CARDIOVASCULARES

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ABSTRACT

Objective: to identify risk factors for cardiovascular diseases that elderly are exposed when assisted in the Family Health Strategy. **Method:** a quantitative study with 70 elderly assisted in the Family Health Strategy of Cuité, State of Paraíba/PB. The data were collected using a questionnaire and analyzed by univariate and bivariate exploratory inferential statistics. The research project was approved by the Research Ethics Committee, under paragraph CAAE 10156312.0.0000.5188. **Results:** 74.4% elderly were overweight or obese, 87.1% elderly had high risk of the abdominal circumference and 60.0% elderly had hypertension with or without regular treatment. An association between waist circumference and gender were found, presumably explained by feminine increased trend to accumulate subcutaneous fat. **Conclusion:** the exposure of elderly with predisposing factors for cardiovascular disease is diverse, requiring appropriate and effective interventions by the health care system for his prevention. **Descriptors:** Elderly; Risk Factors; Cardiovascular Diseases.

RESUMO

Objetivo: identificar os fatores de risco para doenças cardiovasculares as quais estão expostos os idosos assistidos na Estratégia Saúde da Família. **Método:** estudo quantitativo, realizado com 70 idosos assistidos na Estratégia Saúde da Família de Cuité, Estado da Paraíba/PB. Os dados foram coletados com questionário e analisados por meio de estatística exploratória univariada e inferencial bivariada. O projeto de pesquisa teve a aprovação do Comitê de Ética em Pesquisa, sob o CAAE nº 10156312.0.0000.5188. **Resultados:** 74,4% apresentaram sobrepeso ou obesidade, 87,1% risco elevado quanto ao perímetro abdominal e 60,0% hipertensão arterial com ou sem tratamento regular. Constatou-se associação entre perímetro abdominal e gênero, supostamente explicado pela tendência feminina aumentada para acumular gordura subcutânea. **Conclusão:** a exposição de idosos a fatores predisponentes para as doenças cardiovasculares é diversa, exigindo intervenções adequadas e eficientes por parte do sistema de saúde para a sua prevenção. **Descritores:** Idosos; Fatores de Risco; Doenças Cardiovasculares.

RESUMEN

Objetivo: identificar los factores de riesgo para enfermedades cardiovasculares a las que el anciano está expuesto atendidos en la Estrategia de Salud de la Familia. **Método:** estudio cuantitativo, realizado con 70 ancianos atendidos en la Estrategia de Salud de la Familia de Cuité, Estado de Paraíba/PB. Los datos fueron recogidos con cuestionario y analizados por medio de estadística exploratoria univariada e inferencial bivariada. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, sobre el CAAE número 10156312.0.0000.5188. **Resultados:** 74,4% presentaron sobrepeso u obesidad, 87,1% riesgo elevado referente al perímetro abdominal y 60,0% hipertensión arterial con o sin tratamiento regular. Se constató asociación entre perímetro abdominal y género, supuestamente explicado por la tendencia femenina aumentada para acumular grasa subcutánea. **Conclusión:** las exposiciones de ancianos a factores predispuestos para las enfermedades cardiovasculares son diversas, exigiendo intervenciones adecuadas y eficientes por parte del sistema de salud para su prevención. **Descriptor:** Ancianos; Factores de Riesgo; Enfermedades Cardiovasculares.

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education can improve living conditions and therefore, positive impact of early mortality, because the greater the level of education, the lower the involvement with these diseases.¹⁴ Thus, considering that the smaller the business, the highest rate mortality by CVD¹⁵, it is possible to see that most of the elderly in this study is vulnerable to cardiovascular disease, because of the high age, low education and poor family income.

For diseases and family history of heart disease, it was possible to see that there was a difference between genders surveyed. For SAH, 54.3% of the male sample denied having a diagnosis of this disease, whereas 74.3% of females reported being diagnosed with it. The same was repeated with diabetes mellitus, but with different values, where 82.9% of men have denied DM, while 82.9% of women reported diabetes diagnosis.

There was a research to observe the reason of such discrepancy between different genders, but a hypothesis was raised to the lack of attention to male health. It is known that men do not have the same level of health care than women, whether because of the macho culture that imposes males as strong and not necessitating care, or by the fact that the health system is unable to meet men satisfactorily. Thus, they end up not having these diseases diagnosed at the basic levels of care.

Therefore, it is necessary to have a thorough investigation in order to ascertain the reason why so few men have or know they have SAH or DM. After all, there is uncertainty whether something is organic or if it strictly follows the low effectiveness of the health service.

Regarding family history of heart disease, average values for both male and female and the total were observed. It is important to highlight a positive family history fundamental in the development of CVD affecting some modifiable risk factors. The earlier a first degree relative (age 55 years old for a male relative or 65 years old for women), the greater the risk of CVD.¹⁶ So for those elderly who attribute the presence of family members with a history of such injuries, it is important that strategies for health promotion and disease prevention are directed for them, minimizing the risk of triggering a cardiovascular disease.

In relation to CVD risk factors, it is possible to see that 74.4% of the sample is overweight or obese on the BMI. This fact is homogeneous for different genders. Obesity, whose incidence in different populations is greater than 15%, is a risk factor for developing

cardiovascular disease, type 2 diabetes and some cancers. The number of elderly obese has also risen in recent years, generating negative implications for the impact on quality of life and independence with limitations in performing the activities of daily living and mobility.¹⁷

Regarding the waist circumference, it is observed that most of the sample has high perimeter, resulting in a higher risk for developing cardiovascular diseases. It is also possible to observe that such a high perimeter is observed in both genders, but the magnitude is greater in females, representing almost the entire sample with the higher perimeter. Other studies^{18,19} corroborate these findings, indicating that the accumulation of abdominal-visceral fat in women is a strong trigger condition of CVD.

With regard to blood pressure, much of the sample is comprised of individuals with normal or limit blood pressure, a result because of male. Another important factor is to verify that 37.1% of the female population presents SAH-S isolated, and this percentage is higher than in subjects with normal blood pressure. In this logic, although blood pressure is present within the range considered normal for most of the participants, 42.8% (n = 30) of them were hypertensive, which is configured as a highly relevant and worrying results, considering the BP major risk factor for cardiovascular disease. Thus, it is necessary to develop care strategies against the elderly with hypertension and their families, making them aware of the importance of treatment and monitoring of BP to prevent complications.²⁰

Regarding behavioral factors, we observed that the sample studied is composed of elderly who avoid harmful habits such as smoking and alcohol consumption. Regardless of the gender of the respondents, there were very high percentage of individuals who do not smoke and have no alcohol consumption, being a protective factor for cardiovascular disease.

Smoking is an important accelerator of the aging process, affecting not only the expectation but also the quality of life. Smokers aged over 50 years old have a higher nicotine dependence, have more health problems related to smoking and greater difficulty quitting smoking. The main causes of death from smoking are cardiovascular disease, chronic obstructive pulmonary disease and lung cancer.²¹ Alcohol, one of the most experienced or consumed in Brazil, when taken excessively, is associated with increased risk of death from various causes, including

stroke, several types of cancer, cirrhosis, pancreatitis, accidents, suicide and homicide.¹⁶

It was also verified that there is some balance in the levels of self-reported stress and physical activity. When carefully analyzing the obtained values, it is observed that approximately half of the sample, in both genders and in total, about 50% were without stress and low stress level, whereas the other half (44.3% exactly) had levels between medium and high. This pattern is repeated not only in total but also in males and females, indicating a balance between stress levels.

In this sense, despite the cardiovascular system participate in adaptations to stress, the body associated with this phenomenon, suffers neurohumoral influences that determine the impact of stress on cardiovascular risk. Cardiovascular problems result in increased heart rate, contractility, cardiac output and blood pressure.²² Nevertheless, studies show that stress causes increase cholesterol (TC) and LDL-cholesterol and a small decrease in HDL cholesterol, as well as calcium, magnesium, ascorbic acid and zinc, with the most significant change occurred with zinc, thus confirming the clinical importance of stress on CVD.²³

Regarding the practice of regular physical activity, more than half of the sample reported have regular activities, seen in both genders. Thus, there is a large discrepancy between affirmative and negative regular physical activity, but only a slight tendency for the affirmative was observed. Therefore, it is important to note that sedentary lifestyle constitutes a major risk factor for coronary heart disease in the elderly, the relative risk of coronary heart disease attributable to sedentary lifestyle compared to the risk of hypertension, hyperlipidemia and smoking, and it may have direct or indirect relationship with causes or worsening of various diseases such as obesity, diabetes, hypertension, anxiety, depression, hyperlipidemia, atherosclerosis, pulmonary disease, osteoporosis and cancer.²⁴

Regarding the tests of association between behavioral risk factors with indicators of cardiovascular risk, significance between the female and the high risk from abdominal circumference was found biologically explained by the increased tendency that women have to accumulate subcutaneous fat. Without confirmation of obesity, many women already have severe cardiovascular risk due to excess fat in the abdominal region.

The accumulation of fat in the trunk region and abdomen (android pattern) in women has

increased mainly by changes in recent decades related to eating and living habits, indicating an increasingly intense exposure to cardiovascular risks.²⁵ Other studies show similar results²⁶, highlighting the waist circumference as an important cardiovascular risk factor in women. Moreover, we also demonstrate the need to investigate the balance between sensitivity and specificity of the indicators used in an attempt to identify more appropriate for our population.

The other association was found between education and blood pressure. The hypothesis behind this association is that as there were few representatives of educational levels above the elementary school complete there was variability. Therefore, the sample was concentrated among illiterate and uncompleted elementary education.

CONCLUSION

The risk factors to which the elderly are exposed were: age, family history, hypertension, diabetes mellitus, obesity, sedentary lifestyle, stress, smoking and alcohol consumption, whether in low or high proportions. Regarding the association of socioeconomic and behavioral factors with the risk factors, there was a possible association between gender and waist circumference. Therefore, the simultaneous occurrence of risk factors among the elderly surveyed reveals as a serious public health problem, since it is undeniable the increased risk for CVD when compared to the performance of each factor in isolation.

By understanding that the elderly are exposed to several predisposing factors for CVD, the health care model proposed by the Unified Health System must ensure adequate and efficient intervention to prevent the development of CVD in this population. Thus, it emerges the need to join efforts to develop and implement targeted to the real needs of the population segment in public policies, but also intensify the actions of existing programs such as the Hiperdia, School Health, Best in House, Politics national Food and Nutrition, national Policy for the Promotion of health, home visits, etc., as well as disease prevention through education in the health professionals working in primary care.

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