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RESEARCH

Evidências para o cuidado de enfermagem na avaliação do risco coronariano em pacientes hospitalizados

Evidence for nursing care in the evaluation of coronary risk in hospitalized patients

La evidencia de Cuidados de enfermería en la evaluación del riesgo coronario en pacientes hospitalizados

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ABSTRACT

Objective: assess coronary risk in hospitalized patients the likelihood of developing an acute myocardial infarction over the next decade and discuss the nursing care based on scientific evidence. **Method:** this is a descriptive cross-sectional study. The sample consisted of 42 hospitalized patients. Data were collected between May and June 2013. This study was approved by the Research Ethics Committee of the University of Bahia (protocol 266.907). **Results:** it was checked that 42.5% of hospitalized present a high risk of developing myocardial infarction within the next 10 years. **Conclusion:** The data reveal that there are hospitalized patients in coronary risk becoming clear that the risk was higher with increasing age. **Descriptors:** Coronary risk, Risk factors, Nursing.

RESUMO

Objetivo: avaliar o risco coronariano em pacientes hospitalizados a probabilidade de desenvolver um infarto agudo do miocárdio nos próximos dez anos e discutir o cuidado de enfermagem com base nas evidências científicas. **Método:** trata-se de um estudo descritivo de corte transversal. A amostra foi constituída por 42 pacientes hospitalizados. Os dados foram coletados no período de maio a junho de 2013. Este estudo foi aprovado pelo Comitê de Ética em Pesquisa da Universidade do Estado da Bahia (protocolo 266.907). **Resultados:** foi verificado que 42,5% dos hospitalizados apresentam um alto risco para desenvolver infarto agudo do miocárdio nos próximos 10 anos. **Conclusão:** Os dados revelam que existem pacientes hospitalizados em risco coronariano, ficando evidente que o risco apresentou-se maior com o avanço da idade. **Descritores:** Risco coronariano, Fatores de risco, Cuidados de enfermagem.

RESUMEN

Objetivo: evaluar el riesgo coronario en pacientes hospitalizados desarrollar infarto agudo de miocardio en los próximos diez años y discutir los cuidados de enfermería basada en la evidencia científica. **Método:** se trata de un estudio descriptivo de corte transversal. La muestra consistió en 42 pacientes hospitalizados. Los datos fueron recogidos entre mayo y junio de 2013. Este estudio fue aprobado por el Comité de Ética en Investigación de la Universidad de Bahía (protocolo 266 907). **Resultados:** se encontro que el 42,5% de los hospitalizados presentan un alto riesgo de desarrollar infarto de miocardio en los próximos 10 años. **Conclusión:** Los datos muestran que no son hospitalizados los pacientes en riesgo coronario es bastante evidente que el riesgo fue mayor con la edad avanzada. **Descriptores:** Riesgo coronario, Factores de riesgo, Cuidados de enfermería.

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INTRODUCTION

Scientific evidence related to changes in the profile of the world's population have been driven by demographic, epidemiological and technological transition, and by increasing urbanization and reduction of fertility and mortality rates. These changes have provided changes in profile of causes of death in life expectancy, and the burden of diseases. And among the large group of diseases that affect the world's population, the non-communicable diseases are the most recurrent causes of death, cardiovascular diseases account for nearly half of these non-communicable diseases. [1] This new profile associated with the aging population has contributed to the development of high rates of cardiovascular disease.

In Brazil, the diseases cardiovascular diseases (DCVs) occupy a huge magnitude on the problems related to health, being responsible for the mortality of men and women. [2] the cardiovascular events feature based on the process of atherosclerosis, in which his silent progression has been developing for decades and suffers strong influence of cardiovascular risk factors, such as hypercholesterolemia, hypertriglyceridemia, decreased HDL-c, hypertension, diabetes mellitus and obesity. [3]

These factors are pervasive in society and usually begin in the early stages of life and continue during adult life, however its deleterious effects are accentuated in old age. Thus, it is clear that the aging contributes to the progressive emergence of DCVs able to produce cardiac anatomical and functional changes. [4] What makes it worth knowing the peculiarities of cardiovascular diseases in both adult aging, as in the elderly.

One of the DCVs most functionality of the circulatory system and heart, coronary artery disease (CAD), being represented by the acute myocardial infarction (AMI) and unstable Angina. [5] In 2012, according to DATASUS, IAM was responsible for about 84121 deaths in the country, in the North-East and 22818 4126 in Bahia. [6] in addition to mortality caused by DCVs is worth, however, point out that the handling with the DCVs results in higher expenses for the unified health system (SUS), in particular with medicines, hospitalizations and attention of high complexity. [7]

In recent decades, there were mechanisms capable to explain the pathophysiology, etiology and prevention of cardiovascular diseases, as well as the ability to track and graduating individuals with risk. [8] In front of this issue, the knowledge of the DCVs has aroused the attention of health professionals, especially among nursing professionals, due to its direct action and ongoing care of patients.

In this sense, nursing has assumed an important role in the process of assessment of coronary risk, which ranges from the identification provided for multiple cardiovascular risk factors, monitoring of risk groups, such as: diabetic, obese, hypertensive and elderly and the establishment of preventive care.

Given this, the present study aimed to evaluate the coronary risk of hospitalized patients from medical units (CM) and surgical (CC) of a public hospital in the state of Bahia to develop a WOULD in the next ten years and discuss the care of nursing based on scientific evidence.

METHOD

This is a cross-sectional descriptive study. Participated in this research inpatients in medical units (CM) and surgical (CC) of a public hospital Regional de Guanambi-BA.

The two units the maximum capacity is 42 beds, and 26 in the medical clinic and surgical clinic 16. In this study were included individuals who were in clinical conditions (verbalize, walk, and stand up without aid) to participate in the survey, aged between 20 and 79 years, of both sexes, without discharge forecast, and that had attached to the record results of recent laboratory tests of total cholesterol, HDL-cholesterol, LDL-cholesterol, triglycerides and fasting glucose of not more than six months from the beginning of the collection. Were excluded patients with clinical diagnosis of coronary artery disease (CAD).

Respecting the rules, routines and schedules determined by the patients were addressed in beds they were interned, and invited to participate in the study, and those who agreed signed an informed consent (TFCC). This study was approved by the Research Ethics Committee of the University of the State of Bahia (266,907 Protocol).

The data were collected in the period from May to June 2013 and the instrument used was a questionnaire comprising questions of sociodemographic, clinical, and epidemiological characterization, being included the *Framingham risk score (*ERF).

To get the-demographic information using semi-structured interview being the variable age (in years), autoreferida ethnic group (white, black and Brown), place of residence (city where he resides), origin (urban or rural) and education (without schooling, 1st degree incomplete, 2nd grade, 3rd grade incomplete, 1st grade, 2nd grade complete and full 3 full degree).

The anthropometric measurements were measured with the aid of the following instruments: for weight and height, we used a Professional Mechanical Scales Welmy brand, with Anthropometric Stadiometers bound to same, being found in the institution itself. For waist circumference measures (CA), waist circumference (CC) and hip circumference (CQ) used a measuring tape brand CESCORF, and Extensible the evaluation techniques were performed according to the instructions in the manual of Anthropometry of the National Health Survey (PNS) (9). The IMC was obtained by dividing the body weight for high height

squared (BMI = weight/height^2). [9] Considered themselves obese participants who had BMI ≥ 30. [9]

Blood pressure was measured through the indirect method, using a sphygmomanometer aneroid BD brand, and the procedures were carried out as recommended by the VI Brazilian Hypertension Guidelines[10] were considered hypertensive and/or diabetic patients those who made use of oral hypoglycemic, insulin, antihypertensive, or with medical diagnoses already known by the patient. The results of the laboratory tests (blood glucose, total cholesterol and its fractions) were collected directly from the patient records when they were found in annex.

It was considered the condition of smoker individuals with daily use of cigarettes, without determining the amount.

To evaluate the coronary risk using the *Framingham risk score (ERF)*, instrument of importance in the field of prevention, suggested by the Brazilian society of Cardiology[11] and recommended by Ministry of health[12] for cardiovascular risk assessment in the care of adults within the unified Health System, and adapted to the Brazilian context.

The ERF is based on the sum of multiple risk factors in a table, namely: age, total cholesterol, HDL cholesterol, smoking (smoking or non-smoking), systolic blood pressure (SBP) with specific scores for men and women, plus specific scores for the correction factors of importance in the Brazilian population, being they: the family history of first degree for DAC and obesity (BMI ≥ 30) associated with the CA ≥ 102 cm in men and ≥ 88 cm, CA. At the end of this sum and appropriate adjustments made by correction factors are risk stratification of a coronary event (myocardial infarction fatal and non-fatal) estimated for the next ten years. Thus, low-risk individuals for occurrence of a coronary event would have a probability of less than 10%; medium risk, between 10% and 20% and high risk, equal to or greater than 20%. [12]

The results were entered into a spreadsheet from Excel for Windows Program and analyzed through the *Statistical Package for Social Sciences* (SPSS) version 19.0. Categorical variables were expressed as percentage and absolute values, and the continuous in mean and standard deviation. The data were discussed in parallel with the scientific literature with recommendations acceptable levels, using the evidence based nursing in order to subsidize the practice of nursing professionals, as well as any other health professional who participates in the process of care.

RESULTS AND DISCUSSION

We evaluated 42 patients of medical and surgical clinics of the Regional Hospital of Guanambi-BA, being these 59.5% (n = 25) male, 64.3% belong to non-white ethnic group, 47.6% (n = 20) had 1st degree incomplete, 54.8% (n = 23) were residing in the urban area of Guanambi and 54.2% (n = 19) in rural municipality and other municipalities in the region.

The average age was 50.81 years (SD ± 18.71), 54.6% (n = 23) of 50-59-year-old range and 45.7% with 60 or more.

In table 1, data are presented of coronary risk factors used in the calculation of the *Score Framingha*d. when reviewing clinical patients were evidenced: high concentrations of total cholesterol (> 200 ml/dL) at 40.5% (n = 17), smoking in 35.7% (n = 15), high concentrations of HDL (< 40 ml/DL) with 57.1% (n = 24), high blood pressure, with an emphasis on systolic blood pressure (SBP) > 140 mmHg in 52.4% (n = 22) , lack of awareness of the participants about the diabetes mellitus 33.3% (n = 14) and a family history of coronary heart disease (CHD) early in 61.9% (n = 26) and at high risk to develop were 45.2% (n = 19), over the next 10 years.

Table 1: Coronary risk factors in hospitalized patients, according to the elements of the *Framingham risk score*, Guanambi-Ba, Brazil. 2013. (n = 42)

VARIABLES	n	%
Cholesterol (ml/dL)		
< 160	12	28.5
160-199	13	31.0
200-239	07	16.7
240-279	08	19.0
≥ 280	02	4.8
Smoking		
Yes	15	35.7
No	27	64.3
HDL (ml/dL)		
> 60	04	9.5
50-59	08	19.0
40-49	06	14.3
< 40	24	57.1
PAS (Sist. mm Hg)		
< 120	08	19
120-129	08	19
130-139	04	9.5
140-159	15	35.7
≥ 160	07	16.7
Diabetes Mellitus		
Yes	06	14.3
No	22	52.4
Don't know how to refer	14	33.3
Family history of Premature CAD (H < < 55 years/M 65 years)		
A Family Member	10	23.8
Two Family Members	06	14.3

Don't know how to refer	26	61.9
Body mass index (Kg/m^2)		
< 30	36	85.7
≥ 30	06	14.3
Cardiovascular Risk		
< 10% (low risk)	18	42.9
10%-20% (medium risk)	05	11.9
> 20% (high risk)	19	45.2

Table 2: Socio-demographic Variables in hospitalized patients, according to the classification of the *Framingham risk score*, Guanambi-BA, Brazil. 2013. (n = 42)

Variables/categories		Coronary risk					
		Low		Medium		High	
		n	%	n	%	n	%
Age group	|--20-29	08	100	-	-	-	-
	|--30-39	06	66.7	01	11.1	02	22.2
	|--40-49	02	66.7	01	33.3	-	-
	|--50-59	01	33.3	-	-	02	66.7
	|--60-69	01	10	01	10.0	08	80.0
	|--70-79	-	-	02	22.2	07	77.8
Sex	Male	11	44.0	02	08	12	48.0
Female		07	41.2	03	17.6	07	41.2
Urban Origin		09	39.1	02	2.7	12	52.2
Rural		09	39.1	03	15.8	07	41.2

As noted in table 2, the variable age was divided into nine-year intervals (from 20 to 29 years 30 to 39, and so on). When assessed coronary risk according to age group, with the advance of age there was an increase in coronary risk in middle and upper strata. On these findings, one can understand that the increased risk to develop an acute myocardial infarction was higher in the elderly aged above 60 years 78.9% (n = 15), being this risk of 80% in the age group of 60 to 69 years and 77.8% in 70 years or more. There was also a prevalence high coronary risk for male patients 48% (n = 12) and with the urban area provenance 41% (n = 07).

In the present study evaluated the patients ' coronary risk adults and elderly hospitalized, using the *Framingham risk score (ERF)* for this to be an important instrument for prevention of coronary risk, of easy application and recommended by the Ministry of health. The option to use the ERF as nursing care allowance, due to the fact that these professionals establish ties routinely care with patients. Making it easier to develop health promotion activities together with those individuals.

The findings of the study showed the high risk for developing a WOULD, over a period of 10 years, in the subgroup of elderly aged above 60 years. In a study carried out in outpatient physical therapy of the Municipal Hospital of Lajedo do Tabocal-BA[13] lower results were identified, where the risk of developing in individuals over the age of 60 years was 61.4%. It is worth noting that the differences identified between the studies can be explained by different populations examined, since in this study evaluated adults and elderly hospitalized.

Another factor that may also have influenced higher prevalence in this study is due to the fact that methodological differences. In our study we worked with *Framingham Score,* in

a version recommended by the Ministry of health, in the year 2012, where variables were included as obesity and a family history of coronary heart disease (CHD). While, in the study conducted in Lajedo do Tabocal-BA[13] had not yet incorporated these variables on the scale. What may have led to an underestimation of results found.

The findings of this study also showed a significant number of 48% (n = 12) of male patients, different from the findings of the survey conducted in Lajedo do Tabocal-BA[13] where he presented 40% of men at high risk of developing CHD. In this sense the male population requires more monitoring in relation to the care of the DAC and other diseases, because these generally only seek health services of medium and high complexity, when we are diseased. [14]

According to the results presented realizes that patients residing in the urban area have gained a significant number in the high risk score (51.2%), presented higher percentage than to patients coming from the countryside. This result confirms with the study conducted in China between the elderly with chronic diseases, in which highlighted the prevalence of heart disease in the urban area compared to those who reside in rural areas. [15]

In this study, a considerable portion of patients from the rural zone was established with high cardiovascular risk 41.2% (n = 7), increasingly significant event in rural communities. This fact is due to the existence of geographic barriers such as distance from the rural area in relation to the urban area which, in turn, hinders the greater access of this population to health services. [16] another explanation for this event can be justified as a result of the urbanization process that went on to influence new ways of living in the field that facilitated access to goods typically urban corroborate with the emergence of risk factors. [17]

In relation to ethnic auto referred to by participants of this study, there is a predominance of non-blanks (Browns and blacks). These findings approach the results found in a survey conducted in the State of Bahia with adults and elderly people, showed that 84% of non-whites had suffered. [18] Although there is still a few Brazilian scientific evidence that may link the ethnicity as a predisposing factor of a coronary event. Further investigations are needed to better clarify the role of ethnicity as a possible determinant of coronary events.

As for education, it was observed that the majority of respondents were between illiterate or persons with only primary education incomplete. These data corroborate with those described in other studies[19.20] that showed higher prevalence of heart disease among people with lower educational level. The low level of schooling can hamper understanding of patients with regard to risk factors and its forms of prevention and appropriate therapy, as well as the stimulus for self-care. [20]

In this perspective, the nurses must create educational practices compatible with each individual, with plain language and according to your experiences, knowledge, beliefs and values, as well as their economic and educational limitations. The nursing staff will be able to achieve changes in life habits and risk factors consistent with therapeutic adhesion proposal, in order to minimize or control the action of the same in the lives of patients. [21]

The smoker habit was evidenced in a small percentage of patients, similar results were also found in another study[22], where 16.9% were smokers and 26.7% ex-tabagista/non-smokers. Second Monengo[23] smoking matches a potent cardiovascular risk factor and represents one of the risk factors more harmful to the health of an individual. It is important

to note, that the nurse as educator, has the key role of emphasizing the harm that tobacco use can bring on health of this population. [21]

For the variables represented by lipid components total cholesterol and HDL-c, values of concentrations changed in comparison to desired values by IV Dyslipidemia guideline. [11] In relation to total cholesterol (TC) concentrations were above the recommended (≥ 200 mg/dL). However, for the fraction of HDL-c were unsatisfactory concentrations (< 40 mg/dL). [11] these results resemble study by SALVARO *et al*.[24], found 38.1% (n = 24) of the sample with high serum CT and 47.6% (n = 30) of HDL-c levels below the recommended. According to KRAUSS,[25] the increase in concentrations of CT is closely related to the increased risk of developing a cardiovascular disease, unlike the high concentrations of HDL-c, which act as a protective factor for these diseases.

Although in this study, the percentages of diabetes mellitus have been smaller in respect for other studies. A considerable percentage didn't know refer to whether or not they are carriers of this pathology, and neither were found evidence on the results of laboratory tests. This result becomes concern for the population studied, serving as a warning, since diabetes is a serious public health problem. And can be considered as coronary risk equivalent. [12] the relative risk increases about five times in women and twice in men compared with non-carriers of this disease. [26]

With regard to uncontrolled pressure was observed in the sample studied levels of systolic blood pressure (SBP) greater than 140 mmHg which can engage potential hypertensive. These results also become worrisome due to the presence of evidence that already demonstrate the independent association between SBP and increase cardiovascular risk. [27] in this respect, prevent patients from exposure to risk factors heart appears as one of the most effective measures to handle the DCVs, but also contributes to improving the quality of life. [28] it is important to emphasize that the effective control of blood pressure decreases the chances of cardiovascular events. [3]

In front of these clinical parameters of glycemic and decontrol loose pressure and other cardiovascular risk factors (CRF) evidenced. Is valid to point out that in recent decades the basis for preventing cardiovascular events has been rigorous control of these risk factors. [3] according to the Ministry of health,[29], the use of non-pharmacological treatment, such as: physical activity, weight reduction, less sodium and alcohol intake has contributed fundamentally in the conduct of clinical hypertension, diabetes and other risk factors, showing noticeable benefits with a reduction of up to 10 mmHg in systolic blood pressure and increased glucose uptake by muscle tissue thus improving glycemic control, and reducing the risk factors for coronary heart disease.

In relation to the correction factors (family history of premature CHD and obesity) considered important to the development of CVD, were included in the calculation of the *Framingham risk score*, and contributed to an increase in the number of patients with high cardiovascular risk in 10 years. This resembles a survey with hypertensive in Juiz de Fora that after the incorporation of these criteria to the *Framingham risk score* modified, increased cardiovascular risk about twice between the sample surveyed, from 12% to 22% of individuals at high risk. [30]

The present study had limitations the absence or incompleteness of the results of laboratory tests of importance to estimate the coronary risk through the ERF. It has made a significant number of participants in the research. In addition, there is a dearth of scientific evidence in nursing who have already investigated at the same time patients hospitalized, with rural and urban origins. Which stresses the need for further research in these environments here discussed, in order to understand the association between the presence of risk factors and the increased cardiovascular risk, as determinants of coronary events.

CONCLUSION

The data reveal that there are patients hospitalized in coronary risk, i.e. this population presents itself in part with risk of developing one WOULD agree the criteria of *framingham score* for the next ten years, evidencing that the risk is higher with age. It was also that for the most part, many are unaware about their co-morbidities such as hypertension, diabetes and HF of DAC. More than half of the sample presented PAS. What reinforces a larger health surveillance in an attempt to prevent future cardiac events. Therefore, the adoption of clinical care delivery should be discussed, developed and implemented in the everyday life of the nursing professional, when the objective is the reduction and control of the morbidity and mortality caused by cardiovascular diseases.

Currently, many hospital patients are not aware about the presence of cardiovascular risk factors in your daily life, much less that can generate visible consequences on quality of life, and may develop a coronary event. It is obvious that many of these factors still go unnoticed by professionals in health institutions.

It is suggested that the nursing staff is qualified to detect the presence of these risk factors in hospitalized patients, in particular, those who reside in rural compared to living in the urban area, as these generally face difficulties in access to health services.

In this context, the condition of nursing care management, should emphasize the maintenance of integral care, based on a reference system and against reference, that is, it requires the maintenance of established care during hospital treatment and thus ensure the transfer of information necessary for the continuity of care in basic attention. It is known that basic care is an environment where nursing has greater autonomy for application of care benefits based on actions of promotion, prevention and control of cardiovascular risk factors.

However, it is necessary that these nurses establish partnerships with other members of the multidisciplinary team, for better understanding of the process of illness of the cardiovascular health, in order to promote the implementation of nursing care manuals-compliant target chronic patients potentially vulnerable and asymptomatic, with a view to the prevention of the IAM.

REFERENCES

1 Laslett LJ, Alagona P, Jr., Clark BA 3rd, Drozda Jr JP, Saldivar F, Wilson SR, et al. The worldwide environment of cardiovascular disease: prevalence, diagnosis, therapy, and policy issues: a report from the American College of Cardiology. J Am Coll Cardiol. 2012; 60(25 Suppl): S1-49. Disponível em: http://dx.doi.org/10.1016/j.jacc.2012.11.002

2 Mansur AP, Favarato D. Mortalidade por doenças cardiovasculares no Brasil e na região metropolitana de São Paulo: atualização 2011. Arq. Bras. Cardiol. 2012; 99(2): 755-761. Disponível em: http://www.scielo.br/pdf/abc/v99n2/aop05812.pdf

3 Santos RD, Gagliardi ACM, Xavier HT, Magnoni CD, Cassani R, Lottenberg AM. et al. I Diretriz sobre o consumo de gorduras e saúde cardiovascular. Arq Bras. Cardiol. 2013 Jan; 100(1Suppl3):1-40. Disponível em: http://www.scielo.br/pdf/abc/v100n1s3/v100n1s3a01.pdf

4 Mendes R, Barata JT. Envelhecimento e pressão arterial. Acta Med Port. 2008; 21(2): 193-8. Disponível em: http://www.actamedicaportuguesa.com/revista/index.php/amp/article/view/769/446

5 Paim CP, Azzolin KO, Moraes MAP. Dor torácica no infarto agudo do miocárdio entre pacientes diabéticos e não diabéticos. Rev. Bras. Enferm. 2012; 65(1): 77-82. Disponível em: http://www.scielo.br/pdf/reben/v65n1/11.pdf

6 Brasil. Ministério da Saúde. Sistema e serviços. Sala Situação em Saúde. DATASUS. Brasília: Ministério da Saúde, 2012. Disponível em: http://www.datasus.gov.br

7 Andrade JP, Mattos LAP, Carvalho AC, Machado CA, Oliveira GMM. Programa nacional de qualificação de médicos na prevenção e atenção integral às doenças cardiovasculares. Arq Bras. Cardiol. 2013; 100(3): 203-211. Disponível em: http://www.scielo.br/pdf/abc/v100n3/v100n3a01.pdf

8 Stein A, Zelmanowicz AM, Lima AK. Promoção da saúde e detecção precoce de doenças no adulto. In: DUNCAN, B.B., SCHMIDT, M.I., GIUGLIANI, E.R.J. (Org.). Medicina ambulatorial: condutas de atenção primária baseadas em evidências. 3. ed. Porto Alegre: Artmed, 2006.

9 Brasil. Ministério do Planejamento, Orçamento e Gestão. Instituto Brasileiro de Geografia e Estatística (IBGE). Pesquisa Nacional de Saúde: PNS2013. Manual de Antropometria. Rio de Janeiro, 2013. Disponível em: http://www.pns.icict.fiocruz.br/arquivos/Novos/Manual%20de%20Antropometria%20PDF.pdf

10 VI Diretrizes Brasileiras de Hipertensão. Arq Bras. Cardiol. 2010; 95(1 Suppl 1): I-III. Disponível em: http://www.scielo.br/pdf/abc/v95n1s1/v95n1s1.pdf

11 Xavier HT, Izar MC, Faria Neto JR, Assad MH, Rocha VZ, Sposito AC. et al. V Diretriz Brasileira de Dislipidemias e Prevenção da Aterosclerose. Arq Bras. Cardiol. 2013. Out; 101(4 Suppl 1): 1-20. Disponível em: http://www.scielo.br/pdf/abc/v101n4s1/v101n4s1.pdf

12 Brasil. Ministério da Saúde, Portaria CP n.15, de 24 de setembro de 2012. Aprova o uso da avaliação do risco cardiovascular no cuidado de adultos no âmbito do Sistema Único de Saúde. Diário Oficial da República Federativa do Brasil, Brasília, DF, 2012. Disponível em: http://portalsaude.saude.gov.br/portalsaude/arquivos/pdf/2012/Set/25/cp15.pdf

13 Mascarenhas CHM, Reis LA, Souza MS. Avaliação do risco de doença coronariana em adultos e idosos no município de Lajedo do Tabocal / BA. Arq Ciênc Saúde Unipar. 2009; 13 (1): 15-20. Disponível em: http://revistas.unipar.br/saude/article/view/2791/2077

14 Ministério da Saúde (Brasil), Secretaria de Atenção à Saúde, Política Nacional de Atenção Integral à Saúde do Homem. Princípios e diretrizes. Brasília: Ministério da Saúde, 2008.

15 Liu Z, Albanese E, Li S, Huang Y, Ferri CP, Yan F, et al. Chronic disease prevalence and care among the elderly in urban and rural Beijing, China - a 10/66 Dementia Research Group cross-sectional survey. BMC Public Health. 2009; 9 (0): 1-11. Disponível em: http://www.biomedcentral.com/1471-2458/9/394/

16 Rodrigues TC, Lima MHM, Nozawa MR. O controle do diabetes melittus em usuários de Unidade Básica de Saúde, Campinas, SP. Ciênc Cuidado Saúde. 2006; 5(1):41-9. Disponível em: http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/5109/3325

17 Oliveira EP; Souza MLA; Lima MDA. Prevalência de Síndrome Metabólica em uma área rural do semiárido Baiano. Arq Bras. Endocrinol Metab. 2006; 50 (3): 456-465. Disponível em: http://www.scielo.br/pdf/abem/v50n3/30643.pdf

18 Gama GGG, Mussi FC, Mendes AS, Guimarães AC. (Des) controle de parâmetros clínicos e antropométricos em indivíduos com doença arterial coronária. Rev. Esc. Enferm USP. 2011 June;45(3):624-631.Disponível em: http://www.scielo.br/pdf/reeusp/v45n3/v45n3a11.pdf

19 Pereira JMV, Cavalcanti ACD, Santana RF, Cassiano KM, Queluci GC, Guimarães TCF. Diagnósticos de enfermagem de pacientes hospitalizados com doenças cardiovasculares. Esc. Anna Nery. 2011;15(4):737-745.Disponível em: http://http://www.scielo.br/pdf/ean/v15n4/a12v15n4.pdf

20 Costa IKF, Tibúrcio MP, Melo GSM, Nunes JP, Néo MEMF, Torres GV. Characterization of diabetics and hypertensive people monitored by the computerized system of registration and monitoring of hypertensive and diabetics. J Nurs UFPE on line. 2012 Nov; 6(11):2719-28. Disponível em: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3281

21 Dourado CS, Macêdo-Costa KNF, Oliveira JS, Paiva ODC, Silva GRF. Adesão ao tratamento de idosos com hipertensão em uma unidade básica de saúde de João Pessoa, Estado da Paraíba. Acta sci, Health sci. 2011; 33(1): 9-17. Disponível em: http://periodicos.uem.br/ojs/index.php/ActaSciHealthSci/article/view/7708/7708

22 Girotto E, Andrade SM, Cabrera, MAS, Ridão EG. Prevalência de fatores de risco para doenças cardiovasculares em hipertensos cadastrados em unidade de saúde da família. Acta Scientiarum Health Sciences. 2009;31, (1):77-82. Disponível em: http://periodicos.uem.br/ojs/index.php/ActaSciHealthSci/article/view/4492/4492

23 Monengo ET; Jardim PCBV. Determinantes de risco para doenças cardiovasculares em escolares. Arq. Bras. Cardiol. 2006; 87(1):37-45. Disponível em: http://www.scielo.br/pdf/abc/v87n1/a06v87n1.pdf

24 Salvaro RP, Júnior SA. Perfil Lipídico e a com Fatores sua Relação de Risco Cardiovascular em Estudantes de Nutrição. Rev. SOCERJ. 2009; 22(5):309-317. Disponível em: http://www.rbconline.org.br/wp-content/uploads/a2009_v22_n05_06rosangele.pdf

25 Krauss RM. Lipids and lipoproteins in patient's whit type 2 diabetes. Diabetes Care. 2004; 27 (6): 1496- 1504, 2004. Disponível em: http://care.diabetesjournals.org/content/27/6/1496.full

26 Fernandes CE, Pinho-Neto JC, Gebaral OCE. I Diretriz Brasileira sobre Prevenção de Doenças Cardiovasculares em Mulheres Climatéricas e a Influência da Terapia de Reposição Hormonal (TRH) da Sociedade Brasileira de Cardiologia (SBC) e da Associação Brasileira do Climatério (SOBRAC). Arq Bras. Cardiol. 2008; 91(1):1-23. Disponível em: http://publicacoes.cardiol.br/consenso/2008/diretriz_DCV_mulheres.pdf

27 Gus M. Ensaios clínicos em hipertensão sistólica isolada. Rev. Bras. Hipertens. 2009; 16(1):26-28. Disponível em: http://departamentos.cardiol.br/dha/revista/16-1/08-ensaios.pdf

28 Gorayeb R, Facchini GB, Schmidt A. Caracterização Psicossocial de Pacientes Internados em Enfermaria de Cardiologia. Rev. Bras. Cardiol. 2012 ;25(3):218-225. Disponível em: http://www.rbconline.org.br/wp-content/Archives/v25n3/v25n03a07.pdf

29 Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Estratégias para o cuidado da pessoa com doença crônica: diabetes mellitus. Brasília: Ministério da Saúde, 2013b.

30 Paula EA, Paula RB, Costa DMN, Colugnati FAB, Paiva EP. Avaliação do risco cardiovascular em hipertensos. Ver Latino-Am Enfermagem. 2013; 21(3): 1-8. Disponível em: http://www.scielo.br/pdf/rlae/v21n3/pt_0104-1169-rlae-21-03-0820.pdf

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