70 - RISK FACTORS ON NON-COMMUNICABLE CHRONIC DISEASES REGARDING TO LIFESTYLE OF THE PEOPLE FROM THE CITY OF PELOTAS-RS

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1.INTRODUCTION

The global process of industrialization, according to Waters (2001 apud GUERRA et al., 2005), has led to an increasing integration of economies and societies of several countries, triggering redefining standards of living.Thus, according to Guerra et al, (2005), there was a significant change in global demographics, due to the reduction in mortality rates and birth rates with increased life expectancy and an aging population. Based on the census conducted by the IBGE (Brazilian Institute of Geography and Statistics), the number of elderly in Brazil increased by 31.3% between 2000 and 2007. To Casado et al., (2009) this process resulted in changes in morbidity profile of the population, where the number of cases of parasitic and infectious diseases declined and gave rise to chronic non-communicable diseases (NCDs). Almeida (2000, apud pamphlet, 2009), highlights the importance of knowledge about this type of disease due to the exchange of the demographic profile of the population and its relationship to diseases such as hypertension and diabetes.

Chronic diseases are defined by Casado et al. (2009) as health disorders that accompany individuals over a long period of time, and may have moments of worsening (flares) or significant improvement. Risk factors for NCDs can be separated into two groups: non-modifiable (age, heredity, gender and ethnicity) and modifiable, related to lifestyle (physical inactivity, smoking) (Casado et al. 2009). Almeida et al. (2002), reports that the growing concern with chronic diseases linked to this increased demand by SUS (Unified Health System), for the treatment of these, generating considerable part of the expenses incurred in the sector. According Groenninga (2009), physical inactivity is a risk factor closely related to the onset of diseases such as hypertension, chronic respiratory diseases and heart disorders. Data from the 2011 SISHIPERDIA System (Registration and Monitoring of Hypertensive and Diabetic) report that in Rio Grande do Sul, the number of diabetics is 1742, 3633 is hypertensive and diabetic patients with hypertension, 10364, in both sexes. Therefore, this study aims to identify the relationship between the presence of risk factors for chronic diseases and lifestyle in individuals over 50 years of both sexes.

2.MATERIALS AND METHODS

In the following study of cross-section, were randomly selected in a social circle, 80 subjects aged over 50 years (62.4 ± 10.36), of both sexes. As instruments, the study used the PAR-Q (Readiness Questionnaire Physical Activity), which was developed by the British Columbia Ministry of Health and reviewed by the Technical Advisory Committee assembled by the Canadian Society of Exercise Physiology. (HEYWARD, 2004). This contains seven closed questions that help the physical education professional to discover the rhythm that must begin physical activity programs and the need for the individual to consult a doctor before starting such a program. We used also ananamnesis, in order to identify data such as blood pressure, presence or absence of pre-existing chronic diseases, age, weight and height. The latter two variables were used to calculate the Body Mass Index (BMI) by dividing the individual weight by the square of his stature and its outcome classified, according Conde et al. (2006) in normal, if <24.9 kg / m², overweight, getting between 25 and 28.9 kg / m², and obese if> 29 kg / m². Other informations collected during the anamnesis was whether the individual had the habit of smoking, level of physical activity and social-economic level, who was qualified according to Table 1:

Table 1.Social-economic level.

	A1-A2	B1-B2	C1-C2	D-E
Monthly income (R$)	3945,00-142	1319,00-3944,00	574,00-131	0-573,00

An analysis of variance (ANOVA) was used for comparison of the results found. Then, we performed a post hoc analysis using the Tukey test ($p < 0.05$).

3.RESULTS

The total number of respondents, 57.25% were women. The distribution of subjects according to social-economic level showed that 32.5% belonged to classes A1 and A2. Table 2 shows the prevalence of risk factors analyzed separated by sex, while, in Table 3 are displayed the factors divided by economic level. Women showed a predominance over men in all factors analyzed, showing greater differences in factor sedentary lifestyle (63.3%). The class C1-C2 had the highest number of hypertensive, having 50% of cases.

Table 2.Prevalence of risk factors for chronic diseases in men and women.

	Men	Women	Total
Sedentarism	11	19	30
Smoking	4	5	9
Hypertension	14	20	34
Obesity	7	8	15

Table 3.Prevalence of risk factors for chronic diseases divided by social-conomic level.

	A1-B2	B1-B2	C1-C2	D-E
Hipertensive	6	10	17	1
Sedentarims	8	7	14	1
Obesity	6	4	4	1
Smoking	3	3	3	0

The data obtainedfrom the measurementof BMI of thesampleare shown in Figures1and 2.In Figure 1, the sample was separatedbysocial-economic level. The classA1-A2 was shownwiththe highest number ofobesewithin the classes, having40% of cases. In Figure 2, the data were analyzedbetweentwo groups,active and sedentary.

Figure 1. Analysis of BMI by social-economic level

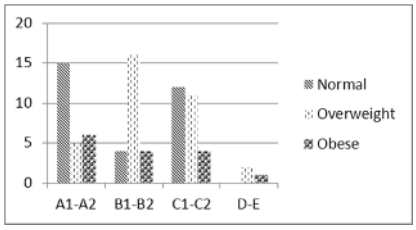
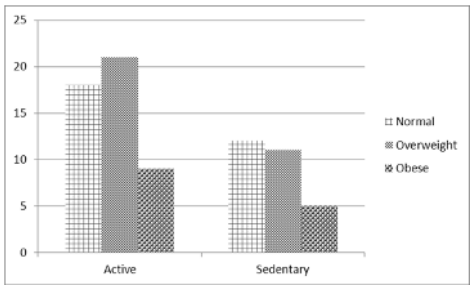


Figure 2. Analysis of BMI between active and sedentary..



With regard to smoking, 88.75% of the sample did not have the habit of smoking, however, as shown in Table 4, when comparing to the BMI, the study found a statistically significant difference between smokers and nonsmokers (p = 0.02) , and in the comparison between genders (p = 0.04). Furthermore, when analyzing values between active and sedentaries hypertensive males, it was found the value of p = 0.02. Also displayed, was a significant difference in values of BMI between actives men andwomen (p = 0.019), as illustrated in table 5.

Table 4.Significant Statisticallydifference in BMI value among the groups.

	Men	Women	Actives	Sedentary	Smokers	Nonsmockers
Average	27.14	25.46	26.7	26.65	23.56	26.54
Standard desviation	3,38	3.86	3.76	3.82	3.81	3.73
(p) =		**0.04***		**0,80**		**0.02***

***statistically significant: p < 0.05**

Table 5. Found values of BMI, divided by groups.

	Actives		Sedentary		Smokers		Nonsmokers		Hipertensive	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Average	27.92	25.57	27.12	26.37	25.83	22.60	27.91	26.32	27,00	28,74
Standart Desviation	3.38	3.58	3.46	4.27	2.33	2.31	3.44	3.83	3,28	3,95
(p) =	**0.019***		**0,63**		**0,07**		**0,07**		**0,18***	

***statistically significant: p < 0.05**

Regarding the responses obtained by the PAR-Q, it was noted that 85% of the sample answered "yes" to at least one quiz'squestion, therefore, there were those who had limitations tophysical activity practice. Of this group, 35.3% were sedentary, 21.56% were obese and 50% were smokers.

Table 6.Listing of the responses obtained through the PAR-Q by risk group.

	Obese		Smokers		Hipertensive		Sedentary	
	Men	Women	Men	Women	Men	Women	Men	Women
Some "yes" answer	6	6	3	3	12	15	9	16
No "yes" answer	1	2	1	2	2	5	2	3

4.DISCUSSION

Based on the results of the study, it was noted that 50% of sedentary have some kind of chronic disease, and of these, 66.6% were women. To Groenninga (2009), this relationship is justifiable, since the inactivity is closely related to the emergence of NCDs. The study also showed that the sedentary, 16% were obese and 36.6% were overweight. About this, Zimmet (2003) and Gubb (2002), argue that high-calorie diets and sedentary lifestyle are the main factors related to the increasing prevalence of

obesity, which is another major risk factor. Moreover, it was found in the group of active people, a higher percentage of subjects classified, according to BMI, as normal: 60%. However, it was found in this group the majority of overweight and obese showed 65.6% and 64.2%, respectively. Furthermore, when analyzing the BMI values between active and sedentary, no significant statistically difference was found, as well as when analyzed the same value between social classes, presented in both cases, value standard $\geqslant 0.05$.

By associating BMI, physical inactivity and socioeconomic status with the risk of developing NCDs, it was noted that 85% of total sedentary scored at least a positive alternative in the PAR-Q, 64% belongs to class C1-C2 and 56.6 % characterize themselves as overweight or obese.

Considering this, it is necessary that people must review their lifestyle, adding to them, healthier habits, such as changes in diet and combating sedentary lifestyle, as suggested by Toscano (2004).

The number of cases of hypertension in the population has been growing, due to the changing profile morbimortality. (Nascimento et al., 2010). Following this, the study found that 42.5% of the sample had this disease. Being obesity increasing in the country, and being this condition a risk factor for major diseases, we analyze the prevalence of it in the sample. It was found that 40% of the obese of these study belonged to class A1-A2 and 80% answered yes to, at least, one question of the PAR-Q.

According Casado et al. (2009), there's a reduction in smoking prevalence in Brazil, since the number of people with this habit has fallen from 30.2% to 16.2% in the period 1989 to 2009. This fall was analyzed in this study, where only 11.25% of the sample were smokers.

5. CONCLUSION

In summary, the present study indicated a strong relationship between the lifestyle adopted by the sample and the prevalence of risk factors associated with non-communicable chronic diseases. Therefore, they are fundamental changes in the habits adopted by the population, such as the practicing of physical activity and healthy eating habits, in order to provide a better quality of life.

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RISK FACTORS ON NON-COMMUNICABLE CHRONIC DISEASES REGARDING TO LIFESTYLE OF THE PEOPLE FROM THE CITY OF PELOTAS-RS.

ABSTRACT

The growing number of cases of chronic diseases - NCDs, has raised concern about the factors that have led people to this situation.The objective of this study is to relate the risk factors associated with non-communicable chronic diseases to the lifestyle in individuals over 50 years of age, of both sexes. We evaluated a sample of 80 subjects ($\geqslant$ 50 years) of both sexes, chosen intentionally. As a tool, we used an anamnese in order to identify data as physical activity level, presence or absence of pre-existing chronic diseases, and body mass index (BMI). An analysis of variance (ANOVA) was used to compare the results found with significant level of 5%. Regarding risk factors associated with NCD, prevailed: sedentarism (37.5%), obesity (18.7%) and smoking (11.2%). Women had a higher prevalence of physical inactivity (63.3%) and smoking (55.5%). Moreover, this studied showed increased presence of NCDs among females: 63.3%. When comparing genders, significant differences were observed when comparing the variable BMI between genders ($p = 0.04$) and smoking ($p = 0.02$). The study concluded that the lifestyle adopted by women who were part of the sample is associated with the presence of non-communicable chronic diseases. The control of risk factors contributed to reduce morbidity and mortality in this population, and improve the quality of life.

KEYWORDS: risk factors, chronic disease, epidemiology

FACTEURS DE RISQUE SUR NON TRANSMISSIBLES MALADIES CHRONIQUES EN CE QUI CONCERNE LA VIE DES GENS DE LA VILLE DE PELOTAS-RS.

RÉSUMÉ

Le nombre croissant de cas de maladies chroniques non transmissibles -, a soulevé des inquiétudes au sujet des facteurs qui ont conduit les gens à cette situation. L'objectif de cette étude est de rapporter les facteurs de risque associés aux maladies chroniques du mode de vie chez les personnes de plus de 50 ans, des deux sexes. Nous avons évalué un échantillon

de 80 sujets (⩾ 50 ans) des deux sexes, choisi intentionnellement. Comme outil, nous avons utilisé une entrevue afin d'identifier les données que le niveau d'activité physique, la présence ou l'absence de maladies préexistantes et chroniques, l'indice de masse corporelle (IMC). Une analyse de variance (ANOVA) a été utilisée pour la comparaison des résultats. Ensuite, nous avons effectué une analyse post-hoc en utilisant le test de Tukey (p <0,05). En ce qui concerne les facteurs de risque associés aux maladies non transmissibles a prévalu: l'obésité sédentaire (37,5%), (18,7%) et le tabagisme (11,2%). Les femmes avaient une plus forte prévalence de l'inactivité physique (63,3%) et le tabagisme (55,5%). Par ailleurs, cette étude a montré la présence accrue des maladies non transmissibles chez les femmes: 63,3%. Lorsque l'on compare les sexes, des différences significatives ont été observées lorsque l'on compare la variable IMC entre les sexes (p = 0,04) et le tabagisme (p = 0,02). En résumé, l'étude a conclu que le mode de vie adopté par les femmes qui faisaient partie de l'échantillon est associée à la présence de maladies chroniques. Le contrôle des facteurs de risque contribue à réduire la morbidité et la mortalité dans cette population, et d'améliorer la qualité de vie.

MOTS-CLÉS: facteurs de risque, les maladies chroniques, l'épidémiologie

FACTORES DE RIESGO DE NO TRANSMISIBLES ENFERMEDADES CRÓNICAS CON RESPECTO A LA VIDA DEL PUEBLO DE LA CIUDAD DE PELOTAS-RS.

RESUMEN

El creciente número de casos de enfermedades crónicas - enfermedades no transmisibles, ha aumentado la preocupación acerca de los factores que llevaron la gente a esta situación. El objetivo de este estudio es relacionar los factores de riesgo asociados a las enfermedades crónicas, del estilo de vida en personas mayores de 50 años de edad, de ambos sexos. Se evaluó una muestra de 80 sujetos (⩾ 50 años), de ambos sexos, seleccionados intencionalmente. Como herramienta, se utilizó una entrevista con el fin de identificar los datos como el nivel de actividad física, la presencia o ausencia de enfermedades crónicas preexistentes, y el índice de masa corporal (IMC). Un análisis de la varianza (ANOVA) se utilizó para la comparación de los resultados. A continuación, se realizó un análisis post hoc mediante la prueba de Tukey (p <0,05). Relativo a los factores de riesgo asociados a las ENT ha prevalecido: la obesidad sedentarismo (37,5%), (18,7%) y el tabaquismo (11,2%). Las mujeres tuvieran una mayor prevalencia de inactividad física (63,3%) y el tabaquismo (55,5%). Por otra parte, este estudio demuestra la presencia cada vez mayor de las enfermedades no transmisibles entre las mujeres: 63,3%. Al comparar los géneros, se observaron diferencias significativas al comparar la variable IMC entre los sexos (p = 0,04) y el tabaquismo (p = 0,02). En resumen, el estudio concluyó que el estilo de vida adoptada por las mujeres que formaban parte de la muestra está asociado con la presencia de enfermedades crónicas. El control de los factores de riesgo contribuye a reducir la morbilidad y mortalidad en esta población, y mejorar la calidad de vida.

PALABRAS CLAVE: factores de riesgo, enfermedades crónicas, la epidemiologia

FATORES DE RISCO PARA DOENÇAS CRONICAS NÃO TRANSMISSIVEIS E SUA RELAÇÃO COM O ESTILO DE VIDA DE PESSOAS DA CIDADE DE PELOTAS-RS

RESUMO

O crescente número de casos de doenças crônicas não transmissíveis – DCNT- tem gerado preocupação sobre os fatores que levaram a população a esta situação. O objetivo deste estudo é relacionar os fatores de risco associados as doenças crônicas não transmissíveis ao estilo de vida em indivíduos com mais de 50 anos de idade, de ambos os sexos. Foi avaliada uma amostra composta de 80 indivíduos (⩾ 50 anos), de ambos os gêneros, escolhidos de forma intencional. Como instrumento, foi utilizada uma anamnese, a fim de identificar dados como nível de atividade física, a presença ou não de doenças crônicas pré-existentes, e o índice de massa corporal (IMC). Uma análise de variância (ANOVA) foi utilizada na comparação dos resultados encontrados. Em seguida, foi realizada uma análise post hoc por meio do teste de Tukey (p < 0,05). Em relação aos fatores de risco associados às DCNT prevaleceram: sedentarismo (37,5%), obesidade (18,7%) e tabagismo (11,2%). As mulheres apresentaram maior prevalênciade sedentarismo (63,3%) e tabagismo (55,5%). Além disso, o presente estudou apontou maior presença de DCNT no sexo feminino: 63,3%. Ao comparar os gêneros, foram constatadas diferenças significativas ao comparar a variável IMC entre os gêneros (p=0,04) e fumantes (p=0,02). Em síntese, o estudo concluiu que o estilo de vida adotado pelas mulheres que fizeram parte da amostra esta associado a presença de doenças crônicas não transmissíveis. O controle de fatores de risco contribui para diminuir a morbimortalidade desta população, além de melhorar a qualidade de vida.

PALAVRAS-CHAVES: fatores de risco, doença crônica, epidemiologia.