59 - THE RELATIONSHIP OF OBESITY AND HYPERTENSION IN BRAZILIAN MEN

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INTRODUCTION:

Hypertention and Obesity are important grievances to the public health. As men are more vulnerable and expose more theirselves to risk factors than women to these illness. The state of serious condition or late discover of these diseases, which could be avoided, requires a more careful look.

The Hypertention is the most recurrent chronic degenerative disease in the world, being charatherized by elevated and sustained blood pressure (>140/90 mmHg in adults.) Difined as a multifactorial clinical condition characterized by high and sustained levels of blood pressure (BP), associating frequently to functional and/or structural target organs (heart, brain, kidneys and blood vessels) and metabolic changes, with consequent increased risk of fatal and nonfatal cardiovascular events (SBC; SBH; SBN, 2010). It is estimated that 1 in 3 people worldwide have hypertension, representing about 2 billion people. It Mainly affects people over 50, and people with normal blood pressure have a 50% chance of getting hypertension. In addition, several genetic and environmental factors influences the increase in blood pressure related to hereditary genetic and familial component, affecting significantly more males. (BRAZIL, 2006, SBC; SBH, SBN 2010).

Among the risk factors the Obesity emerges with significant value. For its incidence, it is considered a major health problem worldwide, with high epidemiological growth, even in countries suffering from hunger and malnutrition (Ferreira et al., 2005). Caused by the accumulation of fat, almost always excessive consumption of calories in the diet surplus to daily needs and decreasing energy expenditure, it is characterized as a worldwide epidemic that knows no borders (WHO, 2012-LOPES MARQUES et al. 2004)

According to the Latin American Consensus on Obesity statistically, each year 200,000 people die due to obesity (Sousa et al., 2003). Brazil has about 18 million people considered obese, and adding the overweight individuals reaches this number reaches 70 million, double three decades ago (GIANT et al., 2004). The increase in obesity generates, as well as other chronic diseases (smoking, drinking, hypertension) outlays on health (WHO, 2002).

The best way to combat obesity, when its existence is related to diet high in calories and low energy expenditure, is the eating habits and physical activity. Studies show that the greatest risk of hypertension and obesity are most evident in large cities than in smaller cities, resulting in higher food consumption, stress and physical inactivity (SBC; SBH, SBN 2010). To avoid these hazards population should adopt healthy lifestyle habits in order to practice proper diets and regular physical activity (SBH; SBC; SBEM; SBD; ABEO, 2005)

Regular physical activity is important for the energy balance, weight control, blood glucose and blood pressure, improves the frames of emotional stress, as well as to decrease the morbidity and mortality rates (Ferraz; MACHADO, 2008). However, it is necessary that we eating habits where the diet presents nutritional able to maintain body weight, and being composed of moderate amount of fat, low simple sugars, fruits, vegetables, legumes, cereals (Geraldo; ALFENAS, 2008).

METHODOLOGY

This is a temporal study, with na exploratory documentary base in a quantitative approach, which general objective is to investigate the relation of hypertension and obesity in men as well as identify the age and race in which these diseases occur more prevalently in regions Southeast and Northeast. For data acquisition, we went to the site Datasus in records from 2008 to 2012 regarding admissions. The sample was defined by the total number of records that occurred in the period 2008-2012. We worked two variables: age and race. Data analysis was performed using simple descriptive statistics.

RESULTS AND DISCUSSION:

The data revealed that both hypertension and obesity are more prevalent and cause more hospitalizations in the Southeast (1627/51212) that the Northeast (231/34416). With a 7:1 ratio of obese patients and 1.5/1 hypertensive hospitalized.

In chatrt 1 it is clear that the behavior of Hypertension in the Southeast was increased, signaling that there is a more effective control pressure levels thereby decreasing its complications. In the northeast the initial behavior was ascending (until 2010) and thereafter descending. Silva (2011) reports that for the occurrence of adequate blood pressure control should go through this treatment adherence and monitoring by the Office of Health. Araújo; Guimarães (2007) state that when a membership is successful, it generates greater regularity in the treatment and provides greater opportunities to adjust the dose of medication and supervision of non-drug therapy .

Table 2 shows that the incidence of obesity was more frequent in mulattos in the Northeast (average of 46.2 admissions year) and white in the Southeast region (average of 325.4 admissions year). As a modifiable risk factor for hypertension , it is necessary a change in lifestyle of hypertension with emphasis on diet and physical activity . Magalhães et al . (2010) noted that the mortality and the risk of cardiovascular disease is twice as high in sedentary and that aerobic exercise can reduce systolic blood pressure by 7 mmHg and 5 mmHg in diastolic blood pressure . Dantas (2013) states that regular physical activity leads to improvement in the health of those who practice it , because besides the benefit of weight loss, it also acts on other factors that may contribute to the installation of SAH.

Chart 1 –Distribution of Hypertension in the Northeast and Southeast by age and color in the period 2008-2012.

Ano/cor		Faixa etária												
		Nordeste							Sudeste					
		<40		40-59		>60		Total	<40		40-59		>60		Total
2008	White	114	8.7	389	29.7	808	61.6	1311	651	8.7	2693	36.2	4101	55.1	7445
	Black	28	8.4	95	28.3	212	63.3	335	147	12.4	506	42.6	534	45	1187
	Brown	555	10.7	1555	29.9	3082	59.4	5192	334	11.8	1162	40.8	1346	47.3	2842
	Yellow	3	4.3	21	30.5	45	65.2	69	3	4.9	21	34.4	37	60.1	61
	Indian	2	13.3	4	26.7	9	60	15	22	64.7	11	32.4	1	2.9	34
	Total	702		2064		4156		6922	1157		4393		6019		11569
2009	White	125	10.4	334	27.6	750	62	1209	630	9.4	2330	34.8	3727	55.7	6687
	Black	29	8.1	93	26	235	65.9	357	164	15.2	421	39	495	45.8	1080
	Brown	625	10.4	1672	28	3683	61.6	5980	355	11.7	1226	40.2	1461	48.1	3042
	Yellow	4	11.7	8	23.5	22	68.8	34	2	4.1	22	44.9	25	51	49
	Indígena	1	16.7	2	33.3	3	50	6	1	2.4	14	33.3	27	64.3	42
	Total	784		2109		4693		7586	1152		4013		5735		10900
2010	White	99	10.3	277	28.9	583	60.8	959	514	8.3	2148	34.8	3503	56.8	6165
	Black	42	12	102	29.1	206	58.9	350	130	13.4	406	41.8	435	44.8	971
	Brown	723	11.5	1869	29.8	3684	58.7	6276	329	10.5	1209	38.5	1598	51	3136
	Yellow	7	20	15	42.9	13	37.1	35	1	2.3	19	44.2	23	53.5	43
	Indian	2	15.4	5	38.4	6	46.2	13	0	0	9	32.1	19	67.9	28
	Total	873		2258		4492		7633	974		3791		5578		10343
2011	White	94	11.4	227	27.4	506	61.2	827	478	8	2001	33.6	3483	58.4	5962
	Black	31	9.1	94	27.8	214	63.1	339	141	14	391	38.8	475	47.2	1007
	Brown	657	11.1	1770	29.9	3490	60	5917	294	10.1	1099	37.8	1515	52.1	2908
	Yellow	2	8.7	6	26.1	15	65.2	23	7	8.4	35	42.2	41	49.4	83
	Indian	0	0	0	0	2	100	2	0	0	0	0	0	0	0
	Total	784		2197		4227		7108	920		3526		5514		9960
2012	White	70	10.7	202	30.7	385	58.6	657	460	9.2	1694	34	2833	56.8	4987
	Black	25	9.4	88	33.2	152	57.4	265	111	13.3	313	37.5	411	49.2	835
	Brown	552	10.1	819	19.4	2848	67.5	4219	219	8.6	1086	42.6	1244	48.8	2549
	Yellow	1	4.2	8	33.3	15	62.5	24	7	10.3	25	36.8	36	52.9	68
	Indian	0	0	0	0	2	100	2	0	0	1	100	0	0	1
	Total	648		1117		3402		5167	797		3119		4524		8440

Table 3 shows the occurrence of hypertension and obesity in both regions remained the standard for the white race in the Southeast and the Northeast brown, the latter similar to that found in Brazil. The behavior of the Southeast becomes distant than the literature indicates. Studies of Costa et al. (2007) and Magnabosco (2007) reveal the occurrence of hypertension in non-white race, with a frequency twice that in white. Silva (2011) also highlights the severity of the disease is also more common non white.

Also highlights the fact that the Southeast region accounts on average for 48% of the cases of hospitalization for obesity and hypertension by 41%. The Northeast accounts for respectively 6.4% and 28.6%.

Chart - 2 Distribution of Obesity essential in the Northeast and Southeast by age and race in the period 2008.

Year/skin colour		Age Group												
		Northeast							Southeast					
		< 40	%	40-59	%	>60	%	Total	< 40	%	40-59	%	>60	%	Total
2008	White	5	62.5	3	37.5	0	0	8	126	56.3	93	41.5	5	2.2	224
	Black	11	76.6	2	14.3	1	7.1	14	7	53.8	5	38.5	1	7.7	13
	Brown	9	69.2	4	30.8	0	0	13	22	64.7	11	32.4	1	2.9	34
	Total	25	71.4	9	25.7	1	2.9	35	75	27.7	99	36.5	7	2.6	271
2009 *	White	3	37.5	5	62.5	0	0	8	156	70.2	63	28.4	3	1.4	222
	Black	5	55.6	4	44.4	0	0	9	6	54.5	4	36.4	1	9.1	11
	Brown	15	53.6	13	46.4	0	0	28	19	50	19	50	0	0	38
	Total	23	51.1	22	48.9	0	0	45	150	52.5	86	35.8	4	1.7	240
2010	White	3	42.9	4	57.1	0	0	7	122	51	110	46.1	7	2.9	239
	Black	2	28.6	5	71.4	0	0	7	17	70.8	7	29.2	0	0	24
	Brown	19	70.4	8	29.6	0	0	27	30	55.6	23	42.6	1	1.8	54
	Total	24	48	26	52	0	0	50	169	53.3	140	44.2	8	2.5	317
2011	White	5	50	5	50	0	0	10	160	55	117	40.2	14	4.8	291
	Black	8	80	1	10	1	10	10	8	47	9	52.9	0	0	17
	Brown	21	70	9	30	0	0	30	42	53.2	33	41.8	4	5.1	79
	Total	34	68	15	32	1	2	50	156	40.3	159	41.1	18	4.7	387
2012	White	1	100	0	0	0	0	1	156	49.8	148	47.3	9	2.9	313
	Black	4	40	6	60	0	0	10	4	28.6	10	71.4	0	0	14
	Brown	25	62.5	15	37.5	0	0	40	37	43.5	53	62.3	1	1.2	85
	Total	30	58.8	21	41.2	0	0	51	197	47.8	205	49.7	10	2.4	412

Chart 3 - Distribution of Obesity and Hypertension by region and in Brazil, the second race in the period 2008-2012

Year/skin colour		Region									
		Obesity		Obesity		Obes	Hypertention		Hypertention		SAH
		SE	%	NE	%	BR	SE	%	NE	%	BR
2008	White	225	52.0	8	1.9	433	7489	60	1323	10.6	12465
	Black	8	24.3	14	42.4	33	1194	66.7	335	18.7	1789
	Brown	35	51.8	13	19.1	68	2858	24.9	5221	45.5	11487
	Yellow	2	100	0	0	2	61	34.7	69	39.2	176
	Indian	0	0	0	0	2	34	23.1	15	10.2	147
Total		270	50.0	35	6.5	538	11636	44.6	6963	26.7	26064
2009	White	225	46.3	8	1.6	486	6706	57.8	1215	10.5	11602
	Black	11	27.5	9	22.5	40	1085	61.7	363	20.6	1758
	Brown	38	37.2	28	27.4	102	3054	23.2	5996	45.5	13158
	Yellow	0	0	1	50.0	2	49	35	32	22.9	140
	Indian	0	0	1	100	1	42	38.5	6	5.5	109
Total		274	43.4	47	7.4	631	10936	40.9	7612	28.4	26767
2010	White	239	46.0	7	1.3	520	6188	59	963	9.2	10483
	Black	24	60.0	7	1.7	40	972	60.7	351	21.9	1602
	Brown	54	51.4	26	24.8	105	2951	22.3	6298	47.6	13221
	Yellow	1	100	0	0	1	43	34.4	35	28	125
	Indian	0	0	0	0	1	28	37.8	13	17.6	74
Total		318	47.7	40	6.0	667	10182	39.9	7660	30	25505
2011	White	292	48.7	10	1.7	599	5981	61.7	830	8.6	9.696
	Black	17	43.6	10	26.6	39	1013	64.5	340	21.6	1570
	Brown	81	55.5	30	20.5	146	2916	23.1	5941	47	12637
	Yellow	2	100	0	0	2	83	55.3	23	15.3	150
	Indian	0	0	0	0	0	0	0	2	5	40
Total		392	49.9	50	6.4	786	9993	41.5	7136	29.6	24093
2012	White	313	49.5	1	0.1	632	5430	62	717	8.2	8762
	Black	14	43.7	10	31.2	32	913	64	290	20.4	1425
	Brown	85	50	40	23.5	170	2875	24.7	5266	45.3	11636
	Yellow	0	0	0	0	0	72	53.7	25	18.7	134
	Indian	1	100	0	0	1	1	3.8	4	15.4	26
Total		413	49.5	51	6.1	835	9291	42.3	6302	28.7	21983

CONCLUSION:

Obesity and hypertension are public health problems and deserve attention for their prevention and recovery. These events are responsible for complications and expense to the public purse and family. In addition to changing the quality of life of their patients.

The Southeast region presents a descending pattern in admissions for obesity and hypertension, indicating that these diseases are being targeted by preventive actions . The Northeast began to show the same profile 2010 onwards . Hypertension is more prevalent in mulattos, but in the Southeast it was highlighted in white. Obesity was more prevalent in Caucasians, with considerable impact on mulatto. For both obesity and hypertension for the preventive measure most prominent is physical activity and nutritional education, and should be promoted by a multidisciplinary team . As a strategy to family health team should seek support from the core to support family strategy which has fitness trainers and nutritionists , and so develop - all - a collective effort to improve the health of man , seeking to combat obesity and control pressure levels , reducing complications and hospitalization rates.

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THE RELATIONSHIP OF OBESITY AND HYPERTENSION IN BRAZILIAN MEN

ABSTRACT

The male group is more exposed to the risk of illness than women. Chronic degenerative diseases is a reality , and among them stands out hypertension and obesity that direct relationship . Temporal , quantitative approach , taking as the source DataSUS . The overall objective was to investigate the relationship of hypertension and obesity in men as well as identify the age and race in which these diseases occur most prevalent in the Southeast and Northeast over the period 2008-2012 . Results revealed that hypertension was more frequent in the Southeast in 2008 , an upward trend , and the Northeast in 2010 , with ascending and then descending behavior . Unlike the literature and data from Brazil , the breed most affected region in the southeast was branca.No Northeast mulatto was the most prevalent , reinforcing the literature . It is necessary to incorporate preventive measures with emphasis on physical activity and eating habits to combat obesity and controlling blood pressure , lowering their rates of complications and hospitalizations .

KEY - WORDS: Men , obesity, hypertension

RÉSUMÉ

Le groupe mâle est plus exposé au risque de la maladie que les femmes. Maladies dégénératives chroniques est une réalité , et parmi eux se distingue hypertension et l'obésité qui relation directe. Approche temporelle , quantitative , en prenant les DATASUS source. L'objectif général était d'étudier la relation entre l'hypertension et l'obésité chez les hommes ainsi que d'identifier l'âge et la race dans laquelle ces maladies sont plus répandues dans le Sud-Est et Nord-Est au cours de la période 2008-2012. Les résultats ont montré que l'hypertension est plus fréquente dans le Sud-Est en 2008, une tendance à la hausse , et le Nord-Est en 2010, avec croissant et décroissant comportement . Contrairement à la littérature et des données en provenance du Brésil , de la race de région la plus touchée dans le sud- est branca.No Nord mulâtre était le plus fréquent , le renforcement de la littérature. Il est nécessaire d'intégrer des mesures de prévention en mettant l'accent sur l'activité physique et les habitudes alimentaires pour lutter contre l'obésité et le contrôle de la pression artérielle, abaissant leur taux de complications et d'hospitalisations .

MOTS - CLÉS: hommes, l'obésité , l'hypertension.

RESUMEN

El grupo masculino está más expuesto al riesgo de la enfermedad que las mujeres. Enfermedades degenerativas crónicas es una realidad , y entre ellos se destaca la hipertensión y la obesidad que la relación directa. Enfoque temporal y cuantitativo , tomando como fuente los Datasus . El objetivo general fue investigar la relación entre la hipertensión y la obesidad en los hombres , así como identificar la edad y la raza en la que se presentan con mayor prevalencia de estas enfermedades en el sureste y noreste durante el período 2008-2012 . Los resultados revelaron que la hipertensión fue más frecuente en el sudeste en 2008 , una tendencia al alza , y el Nordeste , en 2010 , con el ascendente y luego descendente comportamiento. A diferencia de la literatura y de los datos de Brasil , la raza de la región más afectada del sureste era branca.No noreste mulato fue el más frecuente , lo que refuerza la literatura. Es necesario incorporar medidas preventivas con énfasis en la actividad física y hábitos alimenticios para combatir la obesidad y el control de la presión arterial, la reducción de sus tasas de complicaciones y hospitalizaciones.

PALABRAS - CLAVE : hombres, la obesidad , la hipertensión

A RELAÇÃO DA OBESIDADE E A HIPERTENSÃO ARTERIAL EM HOMENS BRASILEIROS

RESUMO

O grupo masculino se expõe mais aos riscos de adoecimento que mulheres. As doenças crônicas degenerativas é uma realidade, e dentre elas destaca-se a hipertensão e a obesidade que mantêm relação direta. Estudo temporal, de abordagem quantitativa, tendo como fonte a o DataSus. O objetivo geral foi investigar a relação da hipertensão arterial e obesidade em homens, bem como identificar a faixa etária e a raça em que esses agravos ocorrem com mais prevalência nas regiões Sudeste e Nordeste no período de 2008 a 2012. Resultados revelou que a hipertensão foi mais frequente no Sudeste no ano de 2008, apresentando um comportamento ascendente, e no Nordeste em 2010, com comportamento ascendente e depois descendente. Diferentemente do literatura e dos dados do Brasil, a raça mais acometida na região sudeste foi a branca.No Nordeste a raça parda foi a mais prevalente, reforçando a literatura. É necessário a incorporação de medidas preventivas com ênfase na atividade física e na reeducação alimentar para combater a obesidade e controlar os níveis pressóricos, diminuindo suas complicações e os índices de internações.

PALAVRAS - CHAVES: Homens, obesidade, hipertensão arterial