

Health markers of men in a small city

Marcadores de saúde do homem em um município de pequeno porte

Marcadores de salud de los hombres en un municipio pequeño porte

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ABSTRACT

Objective: Identifying markers of men's health. **Methods:** Descriptive, exploratory study with a quantitative approach, held in a small town in Minas Gerais. The data collection occurred from October to December 2013, using 217 structured forms with information from men. **Results:** 134 (62%) forms were filled during visit at the primary health care unit and the rest, on the day of the nutritional census performed in the city; 58% of men were overweight and obese and the prevalence of hypertension and *diabetes mellitus* was 17.5% and 4.6% respectively. Cardiovascular diseases were greater among men and their diet includes a large percentage of processed foods. **Conclusion:** Health markers identified in man highlight the need for operationalization of strategies that strengthen the participation of the male audience on actions of health promotion.

Keywords: Men's Health; Comprehensive Health Care; Health Policy; Health Services.

RESUMO

Objetivo: Identificar marcadores de saúde do homem. **Métodos:** Pesquisa descritiva, exploratória com abordagem quantitativa realizada em um município de pequeno porte de Minas Gerais. A coleta de dados ocorreu de outubro a dezembro de 2013, utilizando-se 217 formulários estruturados com informações de homens. **Resultados:** 134 (62%) formulários foram preenchidos durante o atendimento na Unidade de Atenção Primária à Saúde e o restante no dia da chamada nutricional realizada pelo município; 58% dos homens apresentaram sobrepeso e obesidade e a prevalência de hipertensão arterial sistêmica e *diabetes mellitus* foi de 17,5% e 4,6%, respectivamente. As doenças cardiovasculares mostraram-se mais presentes entre os homens, e sua alimentação inclui um grande percentual de alimentos processados. **Conclusão:** Os marcadores de saúde identificados no homem apontam a necessidade de operacionalização de estratégias que fortaleçam a participação do público masculino nas ações de promoção da saúde.

Palavras-chave: Saúde do homem; Assistência integral à saúde; Política de saúde; Serviços de saúde; Atenção à saúde.

RESUMEN

Objetivo: Identificar los marcadores de salud del hombre. **Métodos:** Estudio descriptivo, exploratorio, con abordaje cuantitativo, realizado en un pequeño municipio de Minas Gerais. La coleta de datos se produjo desde octubre hasta diciembre de 2013, utilizando 217 formularios estructurados con informaciones de los hombres. **Resultados:** 134 (62%) formularios fueron llenados durante el atendimento en la Unidad de Atención Primaria a la Salud, los demás, se completaron en el día de la convocatoria nutricional realizada por el municipio; 58% de los hombres estaban con sobrepeso y obesidad; la prevalencia de la hipertensión arterial y la *diabetes mellitus* fue de 17,5% y 4,6%, respectivamente. Las enfermedades cardiovasculares fueron predominantes entre los hombres y su dieta incluye un gran porcentaje de los alimentos procesados. **Conclusión:** Los marcadores de salud identificados en los hombres destacan la necesidad de operacionalización de estrategias que fortalezcan la participación del público masculino en acciones de promoción en salud.

Palabras-clave: Salud del Hombre; Atención Integral de Salud; Política de Salud; Servicios de Salud.

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INTRODUCTION

Chronic non-communicable diseases (NCDs) are responsible for 45.9% of the global disease scenario. It is estimated that by 2020, two-thirds of this burden will be caused by NCDs with possible displacement of the epidemic incident of chronic diseases to less developed countries¹.

In Brazil, a research conducted in some states of the Northeast and Southeast areas revealed male mortality by different causes, mainly by preventable and avoidable ones. An ascendant curve from 2000 to 2009 was identified in relation to circulatory diseases and malign tumors².

The Ministry of Health in 2009 instituted the National Policy for Integral Attention to the Care of Men (PNAISH) articulated with the National Primary Care Policy Health in order to ensure that the core network is the gateway of this population in health services, aiming for strengthening the actions in networks and for men's health care³.

The male population is distant from health areas and actions, particularly those offered in the Primary Health Care (PHC). Among the reasons given by male audience to avoid attending to health service, there is the fact of feeling healthy. Another issue concerns the incompatibility between their work hours and the work shift of health units⁴.

A study conducted in southern Brazil pointed to the lack of male involvement in actions aimed at health promotion and disease prevention, the difficulty to see themselves as patients and the fear of discovering of any serious disease⁵. It is noted that health services continue prioritizing actions based on procedures and tests that reinforce the centrality of attention to the genital male tract⁶. This perspective diverges from the references of promoting health and wholeness, revealing the need to incorporate to the biological dimension the psychic, social and political aspects that form the man^{6,7}.

The experience of teachers and students in the Education Program at Work Health Surveillance (PET-VS), with the development of actions to strengthen health promotion constituted a motivating factor for conducting this research.

Considering the need for comprehensive health care, this research aims to identify markers of men's health, considering the information about the health status of adults obtained through data contained in the forms of the Recording and Monitoring Nutritional Registers and the Food Consumption Markers by Population Group from the Food and Nutrition Surveillance System (SISVAN)⁸.

Studies published in recent years that interface with the theme of this research, in this very journal, bring scientific evidence focusing on hospitality and construction of bonds⁹, on hindering factors of man's access to the service⁵ and about the vision of the nurses on the health of men in PHC¹⁰. No recent studies have been dedicated to investigate markers of men's health were identified.

The reflections contained in this research contributes to the construction of the knowledge produced on the subject and may support public policies directed to the comprehensive health care of man.

METHOD

A descriptive, exploratory study with a quantitative approach, performed in a small city, the area covered by the Regional Health Department of Juiz de Fora. The municipality is located in *Zona da Mata* area of Minas Gerais and has a population of 3,403 inhabitants, two-thirds of these as countryside residents. Of the total population, 1,789 are men, according to the 2010 Census from Brazilian Institute of Geography and Statistics (IBGE)¹¹.

The study sample was chosen for convenience, consisting of forms with data from the first 217 men (12% of the total), aged between 20 and 59 years who were treated in the study scenario. Of these, 62% (134) of the forms were filled when users sought clinic for monitoring of health conditions, and the others during the nutritional call made by the city.

Data collection was performed by fellowship students of PET-VS during the months from October to December 2013, using the form of Recording and Monitoring Nutrition and Food Consumption Markers of adults⁸.

The registration form contains data about the patients and their home, in addition to nutritional monitoring for all ages, including pregnant women. It enables the checking for the presence of chronic diseases, disabilities, and how the individual is being monitored in PHC. The form with markers of dietary intake aims to broadly characterize the feeding patterns of the individual and not to quantify the diet in terms of calories and nutrients, but rather indicate the quality of food in both its positive and negative characteristics⁸.

The variables studied were age (which was grouped as age groups), race/color, education, weight (kg), height (cm), frequency of food consumption, NCD (sickle cell anemia, *diabetes mellitus*, cardiovascular diseases, hypertension and osteoporosis) and deficiencies and/or complications (iron deficiency anemia, disturbance by iodine deficiency, diarrhea, viral intestinal infections, acute respiratory infection and A hypovitaminosis).

From the information obtained on forms, we prepared the sample characterization, the classification of the Body Mass Index (BMI), the quality of food intake and the frequency of NCDs of men in the municipality studied. BMI was calculated using the formula: $BMI = [weight (kg)]/[height (m)]^2$. This was applied to the values of each participant and grouped according to SISVAN classification¹².

The database was entered in Epi Info version 3.5.2 (2010). This is a public domain software and was developed by the Centers for Disease Control and Prevention in collaboration with the World Health Organization with a focus in epidemiology.

Data were analyzed using absolute and percent frequency. The interpretative analysis was performed from the thematic reference. The project was approved by the Ethics and Research Committee of the Federal University of Juiz de Fora, Opinion N° 384,875, in September 5th, 2013.

RESULTS

Most of the participants reside in countryside areas and are included in the 51-59 years age group; 53% are black and brown skinned and the education evidence reveals the presence of illiterate individuals and a large number of men with incomplete primary education, totaling 52.1%, as shown in Table 1.

Table 1. Characterization of the sample of men from small city regarding residence, age, race and education

Characteristics		n	%
Residence	Urban	77	35.5
	Countryside	140	64.5
	Total	217	100
Age	20-30	28	12.9
	31-40	48	22.2
	41-50	60	27.6
	51-59	81	37.3
	Total	217	100
Race/Color	White	80	36.9
	Black	68	31.3
	Brown	47	21.7
	Yellow	04	1.8
	Not available	18	8.3
	Total	217	100
Education	Illiterate	15	6.9
	Primary, incomplete	98	45.2
	Primary, complete	23	10.6
	Secondary, incomplete	14	6.4
	Secondary, complete	38	17.5
	University	10	4.6
	Not available	19	8.8
	Total	217	100.0

Health markers

Table 2 shows that 42.9% of the sample was classified as overweight and 17% obese.

In relation to the NCDs, it is noted that 17.5% live with hypertension and 1.8% had cardiovascular disease (Table 3).

Table 2. Characterization of sample of men from small city regarding Body Mass Index. Minas Gerais, 2013

Level	Man	
	n	%
Slimness	05	2.3
Eutrophic condition	82	37.8
Overweight	93	42.9
Obesity	33	15.2
Severe obesity	04	1.8
Total	217	100.0

Table 3. Frequency of chronic non-communicable diseases in men of small city. Minas Gerais, 2013

NCD		n	%
Hypertension	Yes	38	17.5
	No	179	82.5
	Total	217	100.0
Diabetes mellitus	Yes	10	4.6
	No	207	95.4
	Total	217	100.0
Cardiovascular diseases	Yes	04	1.8
	No	213	98.2
	Total	217	100.0
Sickle cell anemia	Yes	0	0
	No	217	100.0
	Total	217	100.0
Osteoporosis	Yes	0	0
	No	217	100.0
	Total	217	100.0
Other diseases	Yes	10	4.6
	No	207	95.4
	Total	217	100.0
No diseases	Yes	122	56.2
	No	95	43.8
	Total	217	100.0

The form records show that 73% of the sample reported no disabilities and/or complications, while the others provided no information on the subject.

Food consumption by men in the last seven days of the week studied can be seen in Table 4.

Despite the high percentage of consumption of healthy foods, it was observed that 40 (18.44%) men do not eat fresh

Table 4. Food consumption by men during seven days of the week in small city. Minas Gerais, 2013

Food Consumed	Not consumed		Consumption in last 7 days							Cons./ week %	Total
	n	%	1	2	3	4	5	6	7		
Raw salad	22	10.14	27	36	38	15	13	04	62	89.86	217
Cooked vegetables	20	9.22	22	42	38	13	12	05	65	90.78	217
Fresh fruit or fruit salad	40	18.44	21	27	29	17	10	03	70	81.56	217
Beans	01	0.46	03	03	02	05	03	01	199	99.54	217
Sweet biscuits, candies and chocolates	81	37.32	37	32	13	10	06	06	32	59.90	217
Biscuits, salted snacks	80	36.86	30	31	18	10	07	01	40	63.13	217
Burgers and sausages	92	42.39	47	33	22	08	05	01	09	57.60	217
Chips and fried snacks	100	46.08	43	32	11	13	02	06	10	53.91	217
Soft drinks	59	27.18	41	42	25	04	07	04	35	73.53	217

fruit or fruit salads. Almost all the men (99.54%) said to consume beans every day. On the other hand, more than 50% consumed processed foods such as soft drinks (73.53%), sweet biscuits (59.90%) and chips (53.91%) during the past seven days.

DISCUSSION

The municipality studied has a high Human Development index (0.735), according to the 2010 Census conducted by IBGE¹¹. Its population is composed mostly of dark-skinned ethnicity, which confirms the results found in the sample of men studied, pointing to 53.5% of men who declared themselves as black and/or brown.

The illiteracy rate in the population of men (7.8%) is below the presented in Minas Gerais state (7.9%)¹¹. However, a significant percentage of men with incomplete primary education (45.2%) plus the fact that most men live in the countryside, from the point of view of health promotion, constitutes a disturbing situation regarding their participation in educational activities in the health service. It is noted that the PNAISH provides, among its objectives, the stimulation to the male population for self-care and health, through information, education and Communication³.

We observed that most forms were filled during the time spent in the PHC unit, which may be related to those users seeking these services in order to treat acute or manage chronic disease situations. This result is corroborated by a study which showed that 52.2% of men sought care for acute health problems, and in 23.6% of cases, the pain was the main reason. Among the chronic diseases that motivated the demand for care, hypertension was the most common between users, being 21.4% of the cases⁵.

In Brazil, a study conducted in Goiânia showed that there is a high prevalence of cardiovascular risk factors in both female and male patients. Men presented, among other diseases, a higher

prevalence of hypertension, while in women overweight/obesity and increased waist circumference were predominantly seen¹³.

In the present study, the presence of hypertension, *diabetes mellitus* and cardiovascular disease in the men studied, who are mostly over 40 years old, requires a special attention, considering the BMI classification of those men, which indicated that most of them are overweight and have a relevant percentage of obesity.

Among the markers of health in the context of comprehensive care, the nutritional condition of the person is highlighted and the measurement of this condition is done via BMI classification. The fact that most men have a BMI pointing overweight (42.9%) and an alarming percentage of obesity (17%) indicates a need for educational actions with regard to healthy habits and prevention of comorbidities. The health education can constitute an opportunity to conduct health promotion, disease prevention, clarifying doubts and encouraging men population to care for themselves¹⁴.

In the survey conducted by IBGE in 2008-2009, it is noted that the national prevalence of obesity in men is 12.4%, while in women this rate increases to 16.9%. An interesting fact, however, is related to the behavior of this prevalence over the years. The survey conducted in 1974-1975 to 2008-2009 showed that obesity increased more than four times among men (from 2.8% to 12.4%). In contrast, during the same period, obesity in women increased slightly more than doubled (from 8% to 16.9%)¹⁵. It is inferred, therefore, that currently in Brazil, the prevalence of obesity is higher in women, but the current incidence has been shown greater in men, setting up a counterpoint that may cause changes in the prevalence of obesity among men and women.

Obesity is strongly associated with increased risk of diseases - cardiovascular, cancer or mortality. The National Health and Nutrition Examination Study, developed by the U.S. Centers for Disease Control and Prevention, found that this disease

is associated with increased prevalence of type 2 diabetes, gallbladder disease, coronary artery disease, hypertension, dyslipidemia and osteoarthritis¹⁶. Besides these comorbidities, obesity is related to disability, reduced quality/life expectancy and increased mortality¹⁷.

In this study, the most frequent consumption of beans and vegetables among men shows the typical characteristics of people residing in the countryside area of small cities inside the state of Minas Gerais. The diet based on traditional foods of Brazil, such as rice and beans, was also found in a household budget survey conducted in the period 2008-2009¹⁵. We emphasize, however, that such research has also demonstrated the incorporation of foods with low nutrient level and high energy density with the increasing consumption of juices, soft drinks, coupled with a low consumption of fruits and vegetables by Brazilian population¹⁵.

This evidence meets the results of this study, which shows that over 50% of men surveyed consumed a significant amount of processed and fried foods during the seven days of the week. These results can be seen as worrisome, considering that these eating habits may be contributing to weight gain and its associated comorbidities.

It is worthy to stress the importance of good dietary habits on health promotion and prevention of obesity, cardiovascular disease and hypertension. PHC service constitutes a preferential space for the development of these actions, both to the individual patient and to the whole groups, and is potentially able to provide full attention to the user with overweight and its comorbidities¹⁸.

The development of strategies for the care of men's health must highlight their presence into the service, in order to include them and build bonds that foster knowledge of diagnosis of their health condition⁸, making them as a part to support the care for their health and quality of life.

This study presents as a limitation the fact that the sample was made by convenience. While it is representative of the population and present relevant information on the total, it does not allow the generalization of its results. On the other hand, it may provide reflections within the PHC and subsidize health professionals to step actions for health markers studied important to the care of the man.

CONCLUSION

This study revealed changes in health markers of great relevance to the care of man in primary health care services. The data collected shows that BMI found reflects overweight and obesity and shows high frequency of hypertension in most men studied. It can be inferred that consuming large percentage of processed foods may influence the occurrence of these health disorders.

Despite the significance of the presented results, we highlight the need for studies that expand the number of markers to be analyzed and to deepen the relationship between

them in order to produce evidence that support the planning and implementation of strategies that meet the needs of men in health services.

Considering that the man sought health care mostly to situations of acute or chronic disease management, it is suggested that health professionals who work directly with care or management services operationalize the strategies provided in PNAISH, seeking the promotion, protection and prevention of diseases.

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