Prevalence and factors associated with the use of public health services for adult men

Guilherme Oliveira de Arruda ¹ Thais Aidar de Freitas Mathias ¹ Sonia Silva Marcon ¹

> **Abstract** The aim of this study was to identify prevalence and factors associated with use of public health services by adult males residing in the city of Maringá, Paraná. A household survey was carried out with 410 men aged 20 to 59 years old. Analysis was performed by means of descriptive statistics and multiple logistic regression models. The prevalence of use of public services stood at 56.3%. Men who used public health services most often were those with little education, no health plan, no partner, unemployed, who had more contact with nurses and other professionals, sought the services due to disease/symptoms/ emergency, had difficulties with the service, rated health services as regular and chose attention and promptness as the most important aspects of health services - variables adjusted for family income, economic class and need for treatment. Men's health care should be reorganized according to factors linked to the use of health services by them, with the promotion of greater contact between health services and men and the centering of assistance on users, expanding men's participation in promotional and preventive practices.

Key words Use of health services, Men's health, Gender and health, Health policies

¹ Departamento de Enfermagem, Centro de Ciências da Saúde, Universidade Estadual de Maringá. Av. Colombo 5790, Bl. 1/sala 9, Zona 7. 87020-900 Maringá PR Brasil. enfgoa@gmail.com

Introduction

Health risk production must be assessed from the perspective of cultural and social relations, incorporating the gender dimension as a determinant of the health-disease process among the male population¹. This dimension evidences the view that health care is not proper of young adult men for being linked to fragility, reaffirming the characterization of health services as places for women, children and the elderly². From this viewpoint it can be observed that traditionally in Brazil male particularities have not been recognized in the assistance provided to men in health services³.

Still on the context of use of health services by men, search for assistance usually occurs in extreme situations or at specialized levels of the health system¹. Data from the Outpatient Information System of the Brazilian Unified Health System [Sistema de Informações Ambulatoriais do Sistema Único de Saúde] (SAI-SUS), by Brazilian state and region, indicates that in 2010 the annual average of medical examinations of men aged 20 to 59 years old stood at 0.06, which is quite inferior to the average found among women, 4.3³.

This scenario may be a result of the high number of incomplete records of consultations due to failure to identify gender, age and place of residence, but also to the difficulty in socializing men's health needs³. In Canada, a review study on the health situation of men in the country found that refusal to seek medical consultation reached 80%⁴, which can converge to the increase in hospital morbidity rates. In the city of Maringá, between 2000 and 2011, the number of hospitalizations for most causes, including for those that can be resolved within the context of primary health care, was significantly higher among men than among women⁵.

In the face of the low number of medical consultations and the high rates of hospitalization of men, the Ministry of Health launched in 2009 the National Policy on Comprehensive Care to Men's Health [Política Nacional de Atenção Integral à Saúde do Homem] (PNAISH), in alliance with the National Policy on Primary Care [Política Nacional de Atenção Básica] (PNAB), in order to facilitate men's access to public health services, to foster health promotion actions, to decrease hospitalizations for preventable causes, and early mortality, being an important milestone in the targeting of public resources at actions intended to men's health, especially in adultohood.

Despite its limitations, such as little emphasis

on institutional barriers to men's access to health services, overvaluation of sexual and reproductive health and incipient strategy proposition for men's health care⁶, at its core the political text presents important aspects of male morbimortality in Brazil - for instance, excess mortality, in relation to women, for almost all causes of death, especially from serious and chronic diseases and external causes (mainly from traffic accidents and homicides), in addition to high prevalence of unhealthy behaviors – alcohol abuse, sedentary lifestyle and no use of condoms⁶.

In consonance with this profile is the less frequent use of services by men, a practice that is historically anchored on a sociocultural construction of gender that produces representations capable of distancing men from health care and hindering the recognition of factors associated with male health practices¹. In this sense, according to the literature, the satisfaction of male users with health services is also a factor that may make these individuals inclined to seek them or not. Thus, it is worth highlighting the relevance of research aimed at surveying data on the use of public health services by men, since these data can subsidize the organization of services in conjunction with the socio-cultural dimension of gender that permeates male demands⁷.

Thus, before the scarcity of studies addressing aspects relating to use of health services by men, it is important to investigate more specifically the extent to which this population uses the public network, and the factors associated with this behavior. These findings will allow describing the profile of the man who uses health services, why he uses them and whether he is satisfied with the service provided, which can contribute to the planning of the sector in the development and improvement of care strategies and public policy. Therefore, the objective of this study was to identify prevalence and factors associated with use of public health services by adult men residing in the city of Maringá, Paraná.

Method

This is a cross-sectional study conducted through population-based household survey with adult men residing in the city of Maringá, PR. The sample calculation took as base the number of male inhabitants aged 20-59 years old in 2010⁸, that is, 103,488 men.

The following parameters and estimates were adopted: a 50% prevalence of use of public health

services by adult men, associated with a 5% maximum error of the estimate and a 95% confidence interval. A total of 38 individuals (10%) were added to the minimum sample (383 individuals), considering the possibility of losses, resulting in a sample of 421 men. The selection of interviewees used the systematic random sampling technique; Maringá was divided into 20 Weighting Areas defined from socio-occupational criteria and elaborated by the Brazilian Institute of Geography and Statistics [Instituto Brasileiro de Geografia e Estatística] IBGE. Eligible subjects were males aged 20-59 years old.

The study participants were interviewed in their homes, with subsamples being proportional to the number of adult men residing in each Weighting Area. Streets to be visited were randomly selected, and one man per every four houses on the right side of the street was approached. Interviews were conducted predominantly on weekdays, in the morning and afternoon, between January and July 2013. From the sample interviewed 11 individuals were excluded after answering "No" to the question "Do you use/have used any kind of health service?". The interview finished with this answer. Previous questions addressed health-related behaviors and needs and were not included in the scope of this work. In this work, therefore, information provided by 410 men was considered for the analysis of the use of public services.

The dependent variable was obtained from the question "What kind of health service do you use most often, in terms of management/funding?", with the following answers: Public and Private/ Health plan. From this question it was possible to estimate the prevalence of use of public health services, without defining, however, a period between the interview and the latest episode of use of the health service. Sociodemographic variables were: age group (20-29, 30-39, 40-49 and 50-59), skin color (white and non-white), marital status (No partner and Partner), children (Yes and No), religion (Yes and No), education (up to the 4th Grade, Elementary School, High School and Higher Education), job (Yes and No), household income (up to 2, 2-4, 4-6, Over 6), occupational status (Employer/Self Employed, Employed, Student and Other), health plan (Yes and No) and economic class (Classes A, B and C/D) - which was collected and categorized according to the Brazilian Economic Classification Criterion of the Brazilian Association of Market Research Institute [Associação Brasileira e Empresas de Pesquisas] ABEP9.

The variables relating to use of health services were: professional contact (Doctor, Dentist, Nurse and Other - Community Health Worker, Pharmacist, Nursing Technician), frequent reason (Checkup, Disease/Symptoms/Emergency), need for treatment (Yes and No), health self-perception (Positive and Negative) and reported morbidity (Yes and No). The variables concerning satisfaction with the health service were: difficulty with the service (Yes and No), preparation of health professionals for the service (Yes and No), rate of the health service (Good/Very Good, Regular and Poor/Very Poor), service recommendation to another man (Yes and No) and most important aspect of the service provided (Problem solving, Communication, Attention, Promptness and Other). The categories that presented lower proportion when crossed with the dependent variable were defined as categories of reference of the respective variables.

Satisfaction variables were adopted based on qualitative indicators of satisfaction with the health service identified in a study conducted with 201 adult young and older men in four Brazilian states⁷, and in a study that identified factors associated with satisfaction with public health services in the metropolitan area of Belo Horizonte¹⁰.

Filled out instruments were checked for presence of flaws, coded before compilation and double entered in a database in Microsoft Office Excel 2010 and subjected to descriptive and inferential analyses.

It was possible to find associations between use of health services and sociodemographic variables, and use of health services and satisfaction. With the aid of IBM SPSS 20, univariate analysis was performed by means of Pearson's Chi-square test, and multivariate analysis was done through unconditional Multiple Logistic Regression Models. The Forwards method was employed, in which variables with p < 0.20 in the univariate analysis were inserted in the logistic model by order of significance, which allowed seeing, gradually, significance variations and adjustments, as well as the permanence or exclusion of variables from the model. It is noteworthy that the adjustment variables identified were listed as such in accordance with the changes they caused along the logistic regression analysis and not based on pre-established hierarchical model.

The Hosmer-Lemeshow test (HL) was employed to check the quality of the adjustment of the model (p values closer to 1 indicate better adjustments), and Nagelkerke' R² was used to pres-

ent the explanatory power of the model when the adjustment quality was considered low. The use of Nagelkerke' R^2 alone does not change the findings but points the proportion of variability of the dependent variable, which is explained by the independent variables and model adjustments. The measure of association was represented by Odds Ratio (OR) with a 95% confidence interval and significance level set when p < 0.05 for the tests performed.

The project that led to this study was approved by the Standing Ethic Committee on Research with Human Beings of the State University of Maringa [Univeridade Estadual de Maringá] UEM (Legal Opinion 162 077/2012). The development of the study complied with national and international norms on ethics in research involving humans.

Results

There was predominance of men aged 40-49 and 50-59 years old, of white skin color, with a partner, children, religion, completed high school, who work, with household income between 2.1 and 4 minimum wages, are employers/self-employed, from economic class B and who do not have health plan (Table 1).

The prevalence of use of public services was 56.3%. The exclusion of 11 men who reported not using/having used health services represented an overestimation of approximately 2% in the prevalence of use of public health services. However, because these individuals did not use health services it would not be possible to identify what type of service they most frequently used, whether public or private.

Overall, most participants claimed having greater health-related professional contact with a doctor, seeking health services due to disease/ symptoms/emergency, and perceiving their own health positively. Most also said they had some sort of morbidity, and 32.4% had needed/undergone health treatment. As for satisfaction with the health service they used, 27.2% reported facing some kind of difficulty with the service, the delay to be assisted being the main one (48.7%); most of them believed that the health service they used most often was prepared to care for men's health, rated the health services as good or very good, would recommend it to other men and considered problem solving as the most important aspect in a health service (Table 2).

The univariate analysis showed that the sociodemographic variables "age", "skin color",

Table 1. Characterization of the men interviewed, by sociodemographic variables. Maringá, PR, 2013.

sociodemographic variables. Maring		
Sociodemographic Variables	n	%
Age Group		
20 to 29	91	22.2
30 to 39	93	22.7
40 to 49	113	27.6
50 to 59	113	27.6
Skin Color		
White	237	57.8
Non-white	173	42.2
Marital Status		
No Partner	134	32.7
Partner	276	67.3
Children		
Yes	289	70.5
No	121	29.6
Religion		
Yes	371	90.5
No	39	9.5
Education		
Up to 4 th Grade	45	11.0
Elementary School	99	24.1
High School	153	37.3
Higher Education	113	27.6
Job		
Yes	327	79.8
No	83	20.3
Household Income		
Up to 2	68	16.6
2 to 4	136	33.2
4 to 6	94	22.9
Over 6	112	27.3
Occupational Status		
Employer/Self-employed	167	40.7
Employed	152	37.1
Student	25	6.1
Other	66	16.1
Health Plan		
Yes	197	48.0
No	213	52.0
Economic Class		
Class A	32	7.8
Class B	217	52.9
Class C/D	161	39.3

Table 2. Characterization of the men interviewed, according to variables concerning use of health services, health and satisfaction with services, Maringá, PR, 2013.

Variables	n	%
Variables concerning use of Health Services		
Professional Contact		
Doctor	287	70.0
Dentist	39	9.5
Nurse	21	5.1
Other	63	15.4
Frequent Reason		
Checkup	113	27.5
Disease/Symptoms/Emergency	254	62.0
Other	43	10.5
Health Variables		
Reported Morbidity		
Yes	179	43.7
No	231	56.3
Need for Treatment		
Yes	133	32.4
No	277	67.6
Health Self-Perception		
Positive	314	76.6
Negative	96	23.4
Variables concerning satisfaction with the Health Service		
Difficulties with the Service		
Yes	112	27.3
No	298	72.7
Preparation for the Service		
Yes	226	55.1
No	183	44.9
Rating of the Health Service		
Good/Very Good	267	65.1
Regular	110	26.8
Poor/Very Poor	33	8.1
Health Service Recommendation		
Yes	362	88.3
No	48	11.7
Important Aspect		
Problem Solving	161	39.3
Communication	62	15.1
Attention	116	28.3
Promptness	65	15.8
Other	6	1.5

"education", "household income", "occupational status", "health plan" and "economic class" were associated with use of public health services, whereas "marital status", "having children" and "religion" showed p < 0.20. Thus, the multiple logistic model showed that men with a partner, elementary education and without health plan used public health services significantly more; this model was adjusted for the variables "household income" and "economic class" (Table 3). Although there has been association with not having health plan, it is noteworthy that 23.1% of those with health plan also reported using public services.

As for the variables concerning use of health services, it was found that "professional contact", "frequent reason", "reported morbidity" and "health self-perception" proved associated with use of health services. Thus, the multivariate model showed that men who had frequent contact with nurses or other professionals, who used to resort to the service due to disease/symptoms/ emergency and who had some sort of morbidity used public health services more frequently; the final model was adjusted for the variable "need for treatment" (Table 4).

All variables concerning satisfaction with health services proved associated with use of public services, at least in the univariate analysis. However, in the multivariate analysis the association with the variables "preparation for the service" and "service recommendation" did not remain (Table 5).

Discussion

The prevalence of use of public health services among male residents of Maringá differs from that identified in other studies due also to methodological differences, such as the type of sampling, the period between the interview and latest use of health services - which was not pre-defined in this study –, restrictions as to the type of service, in addition to the fact that other studies mostly involve both sexes and individuals in other age groups^{11,12}.

According to data from the Brazilian Household Sample Survey, in 2003 58.1% of men of all ages have used services offered by the Brazilian Unified Health System [Sistema Único de Saúde] SUS, and 56.3% did so in 2008¹¹. A study conducted in the municipality of Pelotas, RS, with individuals in the age group from 20 to 69 years old found a 35.1% prevalence of use of public services exclusively for medical care sought in the three months prior to the interview¹². Another study, also conducted in southern Brazil and with a population aged 20 to 69 years old, revealed

Table 3. Univariate and multivariate analyses of the association of socioeconomic and demographic characteristics with use of public health services by adult men, Maringá, PR, 2013.

Sociodemographic variables	Use of Public Health Services						
	Univariate Analysis				Multivariate Analysis*		
	n	%	OR(95%CI)	P	OR(95%CI)	p	
Age Group							
20 to 29	46	51.1	1	-		NS#	
30 to 39	48	52.2	1.04 (0.58;1.86)	0.886			
40 to 49	67	58.8	1.36 (0.78;2.37)	0.275			
50 to 59	76	66.7	1.91 (1.08;3.37)	0.025			
Skin Color							
White	125	53.0	1	0.021		NIC	
Non-White	112	64.4	1.60 (1.07;2.39)	0.021		NS	
Marital Status							
No Partner	84	63.2	1.39 (0.91;2.12)	0.120	2.10 (1,10;3.99)	0.024	
Partner	153	55.2	1	0.128	1	0.024	
Children							
Yes	175	60.3	1.42 (0.93;2.18)	0.105		NS	
No	62	51.7	1	0.105		N5	
Religion							
Yes	209	56.5	1	0.100		NS	
No	28	70.0	1.79 (0.88;3.64)	0.100		143	
Education							
Up to 4th Grade	39	84.8	10.85 (4.43;26.54)	< 0.001	3.06 (0,85;10.91)	0.085	
Elementary School	81	83.5	9.85 (5.07;19.14)	< 0.001	3.94 (1,47;10.55)	0.006	
High School	78	51.3	2.05 (1.24;3.39)	0.005	1.36 (0,65;2.82)	0.408	
Higher Education	38	33.9	1	-	1	-	
Job							
Yes	189	57.6	1			2.70	
No	48	58.5	1.04 (0.64 - 1.70)	0.881		NS	
Household Income							
Up to 2	54	79.4	11.03 (5.35;22.77)	< 0.001	1.71 (0,60;4.82)	0.310	
2 to 4	94	68.6	6.25 (3.59;10.90)	< 0.001	1.75 (0,77;3.94)	0.176	
4 to 6	60	64.5	5.20 (2.86;9.47)	< 0.001	1.60 (0,69;3.75)	0.271	
Over 6	29	25.9	1	-	1	-	
Occupational Status							
Employer/ Self-Employed	105	62.9	2.15 (0.92;5.04)	0.077		NS	
Employed	76	50.0	1.27 (0.54;2.98)	0.579			
Other	45	68.2	2.72 (1.06;7.01)	0.037			
Student	11	44.0	1	-			
Health Plan							
Yes	45	23.1	1		1		
No	191	89.3	27.68 (16.03;47.78)	< 0.001	20.44 (11.06;37.75)	< 0.00	
Economic Class							
Class A	4	12.9	1	-	1	-	
Class B	95	44.0	5.30 (1.79;15.66)	0.003	0.96 (0,27;3.44)	0.956	
Class C/D	137	84.6	37.0 (11.91;114.88)	< 0.001	2.74 (0,64;11.65)	0.171	

 $^{^*}Adjusted \ for \ ^"household \ income" \ and \ ^"economic \ class"; \ Hosmer-Lemeshow \ Test = 0.434; \ Nagelkerke's \ R^2 = 0.615 - the \ model \ Adjusted \ for \ ^"household \ income" \ and \ ^"economic \ class"; \ Hosmer-Lemeshow \ Test = 0.434; \ Nagelkerke's \ R^2 = 0.615 - the \ model \ Adjusted \ for \ ^"household \ income" \ and \ ^"economic \ class"; \ Hosmer-Lemeshow \ Test = 0.434; \ Nagelkerke's \ R^2 = 0.615 - the \ model \ Adjusted \ for \ ^"household \ income" \ and \ ^"economic \ class"; \ Hosmer-Lemeshow \ Test = 0.434; \ Nagelkerke's \ R^2 = 0.615 - the \ model \ Adjusted \ for \ ^"household \ income" \ and \ ^"economic \ class"; \ Hosmer-Lemeshow \ Test = 0.434; \ Nagelkerke's \ R^2 = 0.615 - the \ model \ Adjusted \ for \ ^"household \ income" \ Adjusted \ Adjusted \ for \ ^"household \ income" \ Adjusted \ for \ ^"household \ income" \ Adjusted \ Adjusted$ explains 61.5% of the use of public health services by men. *NS = Non-Significant.

Table 4. Univariate and multivariate analyses of the association of variables concerning use of health services with use of public health services by adult men, Maringá, PR, 2013.

Variables Concerning Use of Health Services	Use of Public Health Services						
			Univariate Analysis	Multivariate Analysis*			
	n	%	OR(95%CI)	p	OR(95%CI)	p	
Professional Contact							
Doctor	140	49.0	1	-	1	-	
Dentist	22	56.4	1.35 (0.68;2.65)	0.383	1.41 (0.69;2.87)	0.342	
Nurse	18	85.7	6.25 (1.80;21.71)	0.004	6.37 (1.81;22.44)	0.004	
Other	57	89.1	8.49 (3.74;19.25)	< 0.001	8.47 (3.68;19.52)	< 0.001	
Frequent Reason							
Checkup	51	45.5	1	-	1	-	
Disease/Symptoms/Emergency	156	60.9	1.86 (1.19;2.92)	0.006	1.93 (1.18;3.15)	0.008	
Other	30	71.4	2.99 (1.39;6.43)	0.005	2.15 (0.92;4.99)	0.074	
Reported Morbidity							
Yes	116	65.2	1.71 (1.14;2.56)	0.008	2.46 (1.22;4.95)	0.011	
No	121	52.2	1		1		
Need for Treatment							
Yes	84	63.6	1.41 (0.92;2.17)	0.100	0.67 (0.32;1.42)	0.204	
No	153	55.2	1	0.108	1	0.304	
Health Self-Perception							
Positive	171	54.5	1	0.014		NS#	
Negative	66	68.8	1.84 (1.13;2.99)				

^{*}Adjusted for "need for treatment"; Hosmer-Lemeshow Test= 0.993. * NS = Non-Significant.

that 45.1% of men attended medical consultations through the SUS in the last month before the interview¹³. There was prevalence of 52.5% of use of the public sector among the adult population aged 20 to 59 years old (both sexes) in a medium-sized municipality in southern Brazil¹⁴.

This study found that adult men without health plan were about 20 times more likely to use public health services than men with health plan. This finding, in addition to corroborating those of another study that also investigated the use of health services by men (not exclusively) and identified a significant association with having health plan or not¹⁵, also reinforces the importance of the public system in supporting the health of men who do not have plan and insurance, thus being a point of attention for the actors of health practice within the context of the SUS (Table 3).

Among the men who had health plan, 23.1% also used public health services, and this is due to the search for assistance in both primary care – for instance, vaccination and administration of injectable medicines – and other points of the

network, of greater complexity and higher cost –, such as chemotherapy, radiotherapy, hemodialysis, hemotherapy, among others – which are targets of control by health plan providers, for cost containment purposes¹⁶. Although this study has not investigated this concomitant use, it emphasizes the importance of also paying attention to men who use it to complement their health care (Table 3).

The expansion of services, especially of the family health strategy, has been enabling more people to use public services, although they can afford a health plan, as it is the case of many residents of Maringá, city with Human Development Index (HDI) of 0.808, which is considered as very high – HDI > 0.800¹⁷ – and the second highest per capita income of the state, which is already higher than the national average⁸.

With regard to socioeconomic factors, it is worth highlighting that, despite statistical adjustments, low socioeconomic status has a direct impact on use of public health services¹⁸. The identification that elementary education was associated with use of public services by men

Table 5. Univariate and multivariate analyses of the association between variables concerning satisfaction and use of public health services by adult men, Maringá, PR, 2013.

Variables concerning Satisfaction with the Health Service	Use of Public Health Services						
	Univariate Analysis				Multivariate Analysis*		
	n	%	OR (95%CI)	p	OR (95%CI)	p	
Difficulties with Service							
Yes	88	78.6	3.69 (2.22;6,12)		3.19 (1.75;5.80)	< 0.001	
No	148	49.8	1	< 0.001	1		
Preparation for the Service							
Yes	116	51.3	1			NIC#	
No	121	65.8	1.82 (1.22;2,72)	0.003		NS#	
Rating of the Health Service							
Good/Very Good	134	50.2	1	-	1	-	
Regular	79	71.8	2.53 (1.56;4,08)	< 0.001	1.77 (1.03;3.02)	0.036	
Poor/Very Poor	24	72.7	2.64 (1.18;5,90)	0.017	1.27 (0.49;3.28)	0.615	
Health Service Recommendation							
Yes	200	55.2	1	0.005		NIC	
No	37	77.1	2.72 (1.34;5,51)	0.005		NS	
Important Aspect							
Problem Solving	75	47.2	1	-	1	-	
Communication	35	57.4	1.50 (0.83;2,73)	0.176	1.57 (0.84;2.93)	0.158	
Attention	74	63.8	1.97 (1.21;3,22)	0.007	2.22 (1.32;3.72)	0.002	
Promptness	47	70.1	2.63 (1.43;4,83)	0.002	3.02 (1.60;5.71)	0.001	
Other	5	83.3	5.60 (0.64;49,02)	0.120	3.39 (0.35;32.39)	0.288	

 $^{^{\}ast}$ Hosmer-Lemeshow Test = 0.874. $^{\sharp}$ NS = Non-Significant.

corroborates the findings of study conducted in Pelotas, RS, which found an inverse association between education and use of the public system¹².

In short, education and economic status are predictors of the use of health services as they are associated with the level of knowledge about health and with the adoption of healthier behaviors¹⁹. These factors are related to each other, because the level of education is linked - in addition to knowledge and adoption of self-care activities - to occupational status and work conditions. The latter, in turn, reflect the economic situation, which can limit access to goods, such as health²⁰, which explains the adjustment of the model of the sociodemographic variables for household income and economic class. Furthermore, it is noteworthy that the public health system has been serving part of the population that is historically underprivileged and neglected by health professionals, especially in Primary Care²¹.

The influence of marital status on use of public health services by men identified in this study proves relevant, because this finding has not been observed frequently in studies with the male population. It is considered that the fact that men without a partner have used public health services more may be related to them not purchasing health plans due also to the absence of a partner, besides the economic conditioner. The authors of a study conducted in the city of Ribeirão Preto with 320 individuals aged 18 to 65 years old found that marital status was associated with the male gender as to predicting the use of public health services²⁰. Such association can be explained in light of the gender perspective, in the sense that maintaining a social relationship, in this case having a partner, can be decisive for a man's engagement with protective care practices, including the search for health services²².

The socially instituted male role of partner/ father can lead men to perform preventive care actions, even in public health services, so as to ensure access to health for them and their families, as they consider necessary to keep themselves fit to take care of their family members²³. Among the elderly, this cooperative relationship has also been shown in a study conducted in João Pessoa, PB, with men and women, especially with regard to the adoption of preventive measures²⁴. However, it is essential to consider the cases in which men, mainly adults, do not live with a partner.

Medical care is important for both the users of services and the public health system, and for this reason it has been the object of recent studies on the use of health services^{12,14}. As noted in this study, in general terms (Table 2), the doctor is the professional with which the men reported having more frequent contact. However, it is worth stressing that contact with other professionals, including nurses and community health workers, was the most frequent in public services. This contact is essential for a joint and comprehensive care to the male population, especially considering the multi-professional practice proposed by the family health strategy within the primary care context²⁵ as regulator of health care networks.

However, according to study conducted with nurses, some improvements are still necessary for the implementation of the proposals of this strategy, such as team work, change in the curative conception of the population, strengthening of the bond between professionals and users, accessibility and the counter-reference system²⁶.

This study has focused not only on medical care; on the contrary, it has advanced in the sense that it has identified whether men keep significant contact with other professionals within the context of public health services, which is possible through strategies of change in health care models. Thus, the use of public services in general was considered, encompassing other possibilities of care, even before the biomedical trend that emphasizes the disease and medical performance and also reduces men's health needs to exclusively physical problems²⁷.

However, its results showed that, to a large extent, the search by the male population for public health services is still mostly motivated by diseases and emergencies, especially, according to other studies, among men who tend to procrastinate and do not reach for the health service²⁸. This leads to the worsening of health problems, triggering the need to enter the health care system often for specialized services and a strictly curative care, increasing costs for the SUS²² and the burden for the person and family.

The findings of this study corroborate those of other researches that have also found that diseases still prevail among the general reasons for seeking and using public health services^{11,12}. The search for preventive actions appears in the literature associated with the female population as a historical practice and social ascension²⁹.

Reported morbidity appears as an important indicator of health needs and determines the use of health services by men²⁰. In a study conducted in Ribeirão Preto, SP, for instance, a man not perceiving himself as ill and reporting that he does not have a disease was a factor associated with not seeking for health services²⁰. It is noteworthy that health services should not be organized, and health professionals should not be prepared to assist ill men only, because the preventive and promotional content of health care actions can offer possibilities for the maintenance and protection of men's health, especially among healthy individuals²⁰. This thus brings about a space for the creation of horizontal ties between professionals and users, targeting users, assistance to health needs and reduction of morbimortality³⁰.

As for the variables used as indicators of satisfaction, they can serve to point the quality of the services provided and to contribute to the development of strategies for the adaptation of services to their demands³¹.

This study identified association factors between satisfaction and use of public health services as to the perception of the existence of difficulties to be provided with health care services, the "regular" rate of services most often used, and the choice of good service benchmarks based on attention and promptness (Table 3). Such factors make up a set of aspects to be discussed with the intention of making public sector managers and professionals to improve men's health care. That said, one must consider the importance of supporting the attention focused on the male user of health services in order to establish the continuity of care, to qualify knowledge and decision making by the user³⁰.

In a qualitative study conducted in four Brazilian states the authors found that, in addition to a service based on communication, attention and problem solving, men expect and evaluate promptness in the service as a quality benchmark. In line with this study, promptness – shortest time possible between the search for the service and the performance of the latter – was significantly the most often reported aspect by men who used public health services, thus suggesting the discussion of the attention-promptness paradox. In this sense, men in general claim to have little time to care for their health, which determines the immediacy in the search for resolution 32,33.

Recommending other men commonly used health service evidences the satisfaction or dissatisfaction with a certain service, and in the case of this study, the men who would not recommend it were the ones who used public health services more, presumably because they know these services better and end up noticing existing barriers, which may suggest these men's dissatisfaction with these services. Although this variable has not remained in the multivariate model it keeps its importance in practice as a parameter to be considered in the adaptation of services to male health needs.

Conclusion

The results show that the majority of adult men residing in Maringá have used, at some point, public health services. That points to the need to organize the public healthcare network so this portion of the population can be served.

Alternative practices and user-centered care should be encouraged in order to ensure the users' use of/access to assistance provided by health professionals. A user's opinion on the quality of the service should be prioritized and a subsidy for the structuration of men's health care on the part of health services, which would represent a closer contact with users and their co-responsibility.

Despite some limitations - such as data on access or accessibility of men to public health services specifically not being surveyed, the fact that simultaneous use of different health systems and the data collection schedule have not been considered, which made it difficult to approach those men who work -, the findings are consistent with those of other studies and are supported by them, representing a profile to be considered in the organization of services and training of health professionals with regard to the implementation of health actions that are sensitive to the socio-cultural specificities of the male population.

Collaborations

GO Arruda, TAF Mathias and SS Marcon participated in the conception and composition of the article, in the critical review of the content and in the approval of the final version for publishing.

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