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EFFECT OF THE SEX OF FRONT-DESK WORKERS ON PUBLIC HEALTH SYSTEM ACCESS BY MEN IN RORAIMA, BRAZIL

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ABSTRACT

The aim of the study was to determine whether the sex of the front-desk personnel at public healthcare centres influences the access to healthcare resources by men in Boa Vista. We sought to determine whether there was an association between the number of male and female front-desk personnel present at the healthcare centres and the number of appointments made by male patients of different age groups. Data were collected regarding the number of appointments made by male and female patients aged ≥40 years over a one year's period, and the number and sex distribution of the front-desk personnel at 32 different healthcare centres in Boa Vista. The centres were divided according to the proportion of male and female front-desk personnel. The findings revealed that the number of appointments made by male patients was significantly lesser than that of female patients. Our results showed that the appointments made by male patients were considerably higher in the centres where the number of male and female personnel was equal, as compared to the centres where the number of female personnel was higher. The results verified the known data that the access of public health resources by men is lesser than that by women. It also provided a valuable insight to an important barrier to healthcare access by men.

KEYWORDS: Gender, Front-Desk, Healthcare, Appointments

INTRODUCTION

The Brazilian Comprehensive Healthcare Policy for Men was implemented by Department of Health Care and Department of Programmatic and Strategic Actions (2009). The implementation of the policy was the result of the recognition of the need for focused efforts towards the improvement in the healthcare access and utilization by men. Considering that formulating healthcare policies focusing on women and children is a common practice, it is reasonable to undertake similar steps with focus on men. Such an approach is indeed justified, and studies have shown that a gender-related approach towards policy making does yield good results in promoting gender equality and ensures equity in the distribution of resources (Smith, Robertson & Richardson 2010).

Recent studies have shown that there is a greater utilization of primary healthcare resources by women as compared to men (Carretero, Calderón-Larrañaga, Poblador-Plou et al. 2014). Thus, there is a need for the identification of the barriers to the access of primary healthcare facilities by men. In Brazil, men and women are required to personally

approach healthcare facilities to book appointments. The front-desk personnel are the first point of contact for individuals seeking medical assistance. Considering the conservative nature of the Brazilian society, we believe that the sex of the front-desk professional may have an effect on whether appointments are actually made by men and women approaching the healthcare facility. In this study, we sought to verify this hypothesis and thereby identify some of the barriers that prevent men from accessing primary healthcare resources and develop corrective measures for the same.

DESIGNS AND METHOD

Study Design

This study was designed as an epidemiological, descriptive study with a qualitative approach to data, which was carried out from 27 March 2013 to 28 March 2014. We investigated the number of appointments made by adult male and female subjects of different age groups and compared the number of these appointments in the light of the sex distribution among the front-desk personnel.

Data Collection

Data were collected from 32 different healthcare centres in Boa Vista, Roraima, Brazil. These health centres are located on the outskirts of the city in neighbourhoods with lower population conglomerates. Data were collected from the municipal health records regarding the number of adult patients who made appointments from March 2013 to March 2014. Only unique appointment data were included, i.e., irrespective of multiple visits by the same patient, we considered the number of appointment as one for one patient. In addition, we acquired data from the healthcare centres regarding the number and sex of the personnel manning the front-desk at these centres.

Then, we determined the age and sex distribution of male and female patients approaching healthcare clinics for appointments and compared these data with the sex distribution of the front-desk personnel.

In addition, we performed subgroup analysis by classifying the centres into three groups depending on the sex distribution of the front-desk personnel: Group F, where the number of female front-desk staff members was greater than that of male front-desk staff members; Group M, where the number of male front-desk staff members was greater than that of female front-desk staff members; and Group E, where the number of male and female front-desk staff members was equal. The number of male patients of different age groups taking appointments at the centres in each group were then determined, and the data were compared.

We also collected data from the government census records regarding the male population in Boa vista according to the different age groups and compared these data with the data on the number of appointments made by men of the corresponding age groups.

Statistical Analysis

Unpaired *t*-test was used to test the differences between the mean number of appointments made by men and women in each of the three age groups.

RESULTS

Figure 1 compares the total number of appointments made by male and female subjects of different age groups, over a period of a year. The figure clearly shows that the number of appointments was higher for the women than the men,

in all the three age groups (men vs. women: 40–49 years, 4391 vs. 9885; 50–59 years 5236 vs. 8839; and ≥60 years, 9450 vs. 13748).

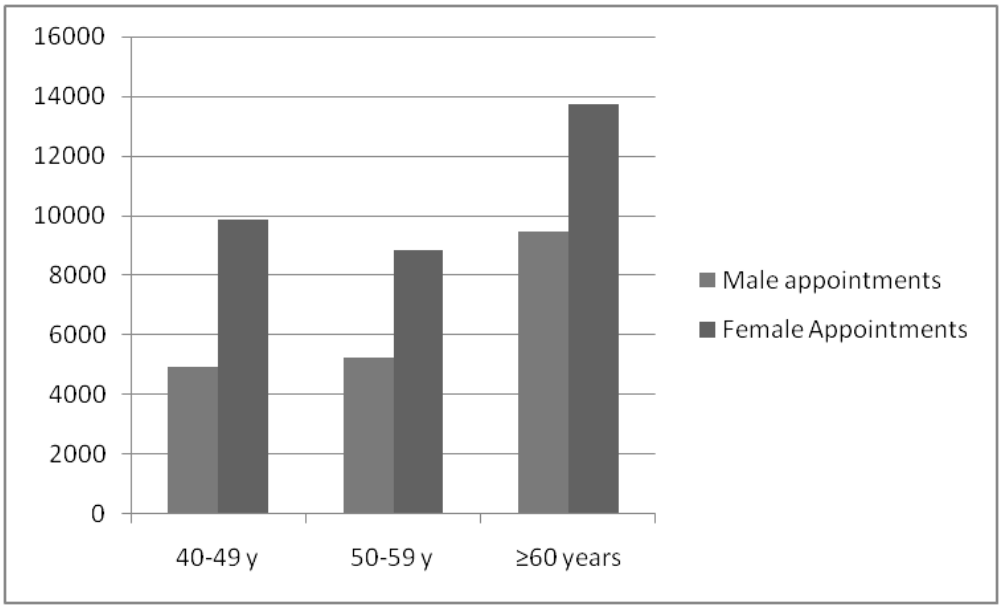

Figure 1: Number of Appointments Made by Male and Female Subjects by Age Group

A comparison of the means of the number of appointments made by male and female patients in each centre (Table 1) by unpaired *t*-test showed that there was a significant difference between the mean number of male and female patients in the age groups of 40–49 years (one-tailed p value, 0.0010, indicating extremely significant difference) and 50–59 years (one-tailed p value, 0.0028, indicating a very significant difference). However, this sex-related difference was not significant in the case of individuals aged ≥60 years (one-tailed p value = 0.0620).

Further, subgroup analysis of the number of appointments made by male subjects at the different centres classified according to the sex distribution of the front-desk personnel shows that the number of men taking appointments was clearly higher at centres where the number of male and female front-desk personnel were equal (Group E) (Table 2).

From Table 3, it is clear that the number of male patients taking appointments in centres belonging to Group E were more than half (52.71%) of those in centres included in Group F. This is surprising considering that Group E includes only seven centres, whereas Group F includes three times the number of centres (n = 21). Further, 16 of the 21 groups in the Group F had less than 500 male patients in a year, whereas all but two centres included in Group E had more than 500 patients. In fact, one of the centres (CSF Asa Branca) included in Group E recorded 1501 male appointments, which is the second highest number of appointments made by men among all the centres.

In all the centres included under Group E, the number of elderly male patients taking appointments was clearly higher than those in the remaining two age groups. Interestingly, the number of appointments made by male subjects was also close to the 500 mark among the centres in Group M, where the number of male front-desk personnel was more than that of female personnel. In fact, in one of the centres in Group M (CSF Silvio Botelho), the number of appointments was over 1000, at 1136, and the number of appointments made by males in the age group of 40–49 years (582) was greater than that those made by the elderly (351), which is the opposite of the trend observed at all other centres.

Further, we compared the data on the male population in Boa vista according to the different ages and the number

of appointments made by male patients of the corresponding age groups (Table 4). The data showed that although the male population was the highest for the age group of 40–49 years, the access of healthcare facilities was the least among this group.

DISCUSSIONS

Studies have on occasion shown that there is no difference in the utilization of healthcare resources by men and women (Farkowski, Pytkowski, Maciag, et al. 2014). However, most studies on various conditions have shown that there is definitely a gap between healthcare access and utilization between men and women (Maurer & Jones 2014). This was also verified in our study, where we have considered only unique appointments, i.e., one appointment per patient. Our findings clearly indicate that the number of appointments made by male patients, especially those between 40–59 years, were lower than those made by their female counterparts. Further, studies have shown that resource utilization increases with age, especially in the case of women in the child-bearing age group (Henneman, Nathanson, Ribeiro et al. 2014). This finding was consistent with those of our study, where a clearly higher proportion of the populations of the elderly age group were found to approach healthcare facilities, as shown in Table 4. Similar findings were reported by Garbinato et al. (2007), who conducted an epidemiological population-based study in Canoas, a metropolitan region of Porto Alegre, Rio Grande do Sul, Brazil, and found that the prevalence of healthcare usage had a statistically significant association with the age of ≥60 years. Considering that the population of males aged between 40 and 49 years is the maximum, this highlights the need for the increased utilization of healthcare resources by men aged between 40–49 years since most of the chronic diseases are known to first manifest at this age group and timely and appropriate management of these diseases could prevent their rapid progress and thereby reduce the overall healthcare burden. In fact, a previous cross-sectional study conducted in Southern Brazil suggests that males seek medical attention mainly for specialized care due to complications of primary diseases, thereby causing a delay in care and a greater burden on the healthcare system (Bastos, Duca, Hallal et al. 2011).

Another reason for the lack of utilization of healthcare resources may be the fact that men perceive less health risk as compared to women (De Moraes, Lopes & De Freitas 2014). The reluctance to approach primary health centres may be linked to a lack of perceived need for medical attention. In fact, a cross-sectional epidemiological study has shown that there is a decreased utilization of primary healthcare resources among men and that increased age, education, income, and sitting-down time as well as history of chronic diseases and/or hospitalization were factors associated with increased utilization of healthcare resources among men (De Moraes, Lopes & De Freitas 2014). Lower appointments by men in this can also be because the health centres are located on the outskirts of the city, where the population is less, although the health centres are within 5 km travelling distance from patient's homes. These findings highlighted the need for developing strategies targeted at increasing utilization of primary healthcare resources by men, thereby preventing the occurrence and progress of chronic diseases. Studies have also shown that while the frequency of seeking acute care was similar among men and women, that for preventive resources was greater for women (Pinheiro, Viacava, Travassos et al. 2002). This implies that men seek attention at advanced stages of diseases, rather than early. This can be inferred from our findings, which showed that compared to the population distribution of men aged 40–49 years, the number of men in this age group actually approaching primary healthcare centres was low. This emphasizes the need for the implementation of strategies to encourage access to healthcare resources by middle-aged men, especially those aged 40–59 years. This would allow for early prevention of chronic diseases, especially hypertension and diabetes.

As mentioned before, the prevalence of access to healthcare systems is low among men. This could be attributed

to the sociocultural aspects of the outlook of men towards seeking medical attention. According to Braz, the process of seeking medical attention may be viewed as sign of physical and psychological vulnerability, which goes against the image that men are socially programmed to portray (Braz 2005). Men may resist the concepts of prevention and primary healthcare because they may associate these ideas with fragility and insecurity, as opposed to virility, exposure to risky situations, as well as lack of vulnerability, which are the cultural traits of a hegemonic view of masculinity (Schwarz 2012).

Even if men overcome these sociocultural barriers and recognize the need to seek medical attention, there may be some barriers that prevent men from actually approaching primary healthcare centres (Pinheiro, Viacava, Travassos et al. 2002). One of these barriers is the inability to take time off from work citing visit to a primary healthcare centre as the reason (Mozer & Correa 2014). All employers may not make allowance for their employees to visit primary healthcare centres, and the need for proper strategies to involve private firms in the implementation of healthcare policies directed at promoting men's health has been recognized.

In view of the cultural background of Brazil, we hypothesized that since the front-desk personnel are the first point of contact and the sex of the person may be the first criteria striking the approaching individual, the sex of the front-desk personnel may influence the access to healthcare centres by men. Our findings clearly verified this hypothesis and showed that the number of male subjects improved markedly when there were an equal number of male and female staff members or at least one male staff member at the front desk. Thus, the absence of male front-desk personnel at primary healthcare centres may be an important barrier that may hinder men from approaching primary healthcare facilities. Men may find it difficult to approach women personnel for help regarding their health, which they may view as presenting a picture of physical and psychological vulnerability (Braz 2005).

Our findings showed that in centres where there was at least one male staff member manning the front-desk, the number of appointments made were remarkably high. This may be because men may be more comfortable with approaching other men, rather than women, for assistance regarding their health concerns. In fact, one of the centres with an equal number of male and female front-desk personnel recorded the second highest number of total appointments made by men among all the 32 centres. Another interesting finding was that in one of the four centres where the number of male staff members was more than that of female staff members, the number of appointments made by individuals of age 40–49 years was greater than those made by the elderly–a phenomenon not noted in any of the remaining 31 centres. Although this phenomenon was observed only at one of the centres, this finding may be noteworthy since only four of the 32 centres had more male than female staff members at the front desk. Put together, our findings clearly indicate that the presence of male front-desk personnel would promote access to primary healthcare facilities. This is a clear and simple solution that can be executed with the use of minimal resources and proper education of the authorities responsible regarding the importance of hiring male front-desk personnel.

Among all the barriers to access to healthcare resources by men discussed in this paper, including socio-cultural inhibitions, inability to take time off from employment, and the absence of male front-desk personnel, the last one can be considered, within reason, to be the one that can be remedied by developing and implementing simple strategies. This is an important outcome of this study since we were able to identify and offer a corrective solution to one the barriers preventing men from accessing primary healthcare centres. Moreover, our findings provide a basic framework for the examination and development of simple strategies that warrant further examination, such as taking appointments by phone or online

booking systems.

This study also has some limitations. The data were collected from the municipal records and only the number of appointments made was taken into consideration, and the data on whether the appointments were actually kept could not be available. Further, the number of centres investigated was small and confined to a single region. Nevertheless, our preliminary analysis highlights an important barrier of the lack of male front-desk personnel that hinders the widespread access of primary healthcare centres by men. Although there was no randomization of samples as we included all centres in Boa Vista, further studies that are more longitudinal and include a greater number of centres from various parts of the country would enable the verification of our findings. Thus, strategies can accordingly be devised to implement simple solutions on a national scale to improve the overall health of middle-aged and elderly men in the country.

CONCLUSIONS

Thus, our findings indicate that the access to primary healthcare resources by male subjects is lesser than that by female subjects. Our results seem to suggest that the presence of only female front-desk personnel may be a barrier to the access of healthcare. This provides a valuable insight towards an important barrier to healthcare access by men. In addition, our findings suggest that ensuring that each healthcare centre has an equal number male and female front-desk personnel or at least one male front-desk staff member will promote the access and utilization of healthcare resources by men. We believe that this simple and practical step will enable early intervention for the prevention and mitigation of conditions, especially chronic diseases, among men and thereby help reduce the overall burden on the healthcare system.

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APPENDICES

Table 1: Distribution of Male and Female Patients in Various Centers According to Age

	Males			Females		
	40–49 y	50–59 y	≥60 y	40–49 y	50–59 y	≥60 y
Ubs Jardim Floresta	143	103	256	294	218	347
Csf Buritis	291	327	683	655	691	992
Csf Olenka	187	230	316	354	331	453
Ubs Caranã	20	41	83	92	88	117
Csf São Vicente	69	152	316	218	355	377
Csf Sílvio Botelho	582	203	351	993	497	574
Csf 31 De Março	371	445	1549	632	696	2228
Csf Asa Branca	336	419	746	711	717	1073
Csf Pricumã	43	61	103	86	97	128
Ubs Santa Tereza	157	177	204	233	271	359
Ubs Silvio Leite	247	263	389	503	358	562
Ubs Alvorada	117	153	134	257	198	313
Ubs Raiar Do Sol	116	146	189	207	210	308
Ubs Lupércio	313	389	482	712	547	591
Csf Délio Tupinambá	113	119	177	143	155	259
Ubs Sen. Hélio Campos	96	98	214	165	151	267
Csf Sayonara Dantas	84	113	247	179	187	418
Ubs Cinturão Verde	91	84	162	167	206	219
Ubs Conjunto Cidadão	129	108	161	184	193	258
Ubs Pintolândia	115	95	141	184	226	263
Ubs Santa Luzia	76	72	134	112	104	192
Ubs Equatorial	149	128	222	314	229	369
Ubs Jardim Primavera	117	136	212	208	164	349
Csf Centenário	53	75	137	116	107	199
Csf 13 De Setembro	56	88	214	109	147	301
Ubs Cambará	298	389	485	794	596	739

Csf São Pedro	53	71	89	97	82	173
Ubs Mecejana	161	211	316	228	197	406
Csf Aygara	11	12	16	17	16	23
Table 1 – Cond.,						
Ubs Cauamé	123	102	275	368	258	282
Csf Caranã	137	135	214	281	273	260
Ubs União	77	91	233	272	274	349

Table 2: Categorization of Male Appointments in Each Center Depending on Gender of Front Desk Workers

Center	M<F	M>F	M=F
Ubs Jardim Floresta	502		
Csf Buritis	1301		
Csf Olenka	733		
Ubs Caranã	144		
Csf São Vicente	316		
Csf Sílvio Botelho		1136(582+203+351)	
Csf 31 De Março	2365		
Csf Asa Branca			1501(336+445+1549)
Csf Pricumã	207		
Ubs Santa Tereza			538(157+177+204)
Ubs Silvio Leite	899		
Ubs Alvorada		404(117+153+134)	
Ubs Raiar Do Sol			451(116+146+189)
Ubs Lupércio			1184(313+389+482)
Csf Délio Tupinambá	409		
Ubs Sen. Hélio Campos	408		
Csf Sayonara Dantas		444(84+113+247)	
Ubs Cinturão Verde	253		
Ubs Conjunto Cidadão			398(129+108+161)
Ubs Pintolândia	351		
Ubs Santa Luzia	282		
Ubs Equatorial	499		
Ubs Jardim Primavera	465		
Csf Centenário	265		
Csf 13 De Setembro	358		
Ubs Cambará			1172(298+389+485)
Csf São Pedro	213		
Ubs Mecejana		688(161+211+316)	
Csf Aygara	39		
Ubs Cauamé			500(123+102+275)
Csf Caranã	486		
Ubs União	401		
Total	10896	2672	5744

Table 3: Number of Male Patients Taking Appointments by the Type of Group

Group	No. of Centers	Total Number of Male Patients
Group F	21	10896
Group M	4	2672
Group E	7	5744

Table 4: Comparison of the Male Population and Number of Appointments Made by Male Subjects According to Age

Age Group	Population	Appointments
40-49 years	16271	4931
50-59 years	9737	5236
≥60 years	7417	9450