Financial implementation and the impact of vascular surgery task force, after the creation of the Strategic Actions and Compensation Fund (FAEC)

Implementação financeira e o impacto do mutirão de cirurgias de varizes, após a criação do Fundo de Ações Estratégias e Compensação (FAEC)

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Abstract

Background: In spite of the fact that the number of surgeries presented by the elective surgery task force did not entirely reflect the reality, it is possible to declare that the financial implementation of the Brazilian Ministry of Health has been significative, as well as the increasing number of varicose vein surgeries, especially after the creation of the Strategic Actions and Compensation Fund (FAEC).

Objective: To evaluate the application of financial investment in the Ministry of Health campaign for varicose vein surgery.

Methods: A transversal study of retrospective nature has been conducted, using information available at the Data Processing Department of the National Healthcare System database (DATASUS). All the authorization of hospital internment from the inferior member varicose vein surgeries, financed by the Brazilian Ministry of Health from January 1998 to December 2004, have been included in the research.

Results: In 1998, before the implementation of the elective surgery task force, 23,531 varicose vein surgeries have been performed, and R\$ 5,819,033.27 invested. After the creation of the FAEC, 457,026 inferior member varicose vein surgeries have been performed from 1999 to 2004, and R\$ 187,760,196.81 were invested with an average of R\$ 31,293,336.13 per year.

Conclusion: Thus, it is possible to conclude that the bigger investment from the Brazilian Ministry of Health, represented by the implementation of the elective surgery task forces by the FAEC, has been responsible for increasing the number of varicose vein surgeries all around Brazil.

Keyword: investments; surgery; varicose veins; venous insufficiency; health profile.

Resumo

Contexto: Apesar de reconhecer que o número apresentado pelo mutirão de cirurgias eletivas não refletisse inteiramente a realidade, foi significativa a implementação financeira do Ministério da Saúde do Brasil, bem como o aumento de cirurgias de varizes, após criação do Fundo de Ações Estratégias e Compensação (FAEC).

Objetivo: Avaliar os resultados da aplicação do investimento financeiro do Ministério da Saúde no mutirão de cirurgias de varizes.

Métodos: Foi realizado um estudo transversal de natureza retrospectiva, utilizando informações do banco de dados do Departamento de Informática do Sistema Único de Saúde. Foram incluídas na pesquisa todas autorizações de internação hospitalar das cirurgias de varizes de membros inferiores pagas pelo Ministério da Saúde do Brasil, no período de janeiro de 1998 a dezembro de 2004.

Resultados: Em 1998, antes da implementação do mutirão de cirurgias eletivas foram realizadas 23.531 cirurgias de varizes e investidos R\$ 5.819.033,27. Após a criação do FAEC, foram realizadas 457.026 cirurgias de varizes de membros inferiores, no período de 1999 a 2004, e foram investidos R\$ 187.760.196,81 com média de R\$ 31.293.336,13 por ano.

Conclusão: O investimento feito pelo Ministério da Saúde durante o programa de mutirões de cirurgias eletivas pelo FAEC, proporcionou aumento significativo do número de cirurgias de varizes em todo Brasil.

Palavras-chave: investimentos em saúde; cirurgia; varizes; insuficiência venosa; perfil de saúde.

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Introduction

Venous diseases are the seventh most frequent cause of chronic disease in human beings, with high demand for health services, not only for cosmetic reasons, but also for the complications, functional limitations and suffering that they cause to patients1.

In Brazil, chronic venous insufficiency ranked 14th among the 50 diseases that caused absence from work and 32nd among the diseases that led to early retirement² in 1984, according to data from the Ministry of Health.

The simple surgical correction of the superficial venous system problems may lead to functional improvement of both deep venous system and venous insufficiency³⁻⁵. Therefore, the early performance of such surgical correction can many times prevent venous diseases and reduce treatment costs⁶.

With the purpose of expanding the access of the National Healthcare System (SUS) user to elective surgery, and knowing that venous diseases were potentially limiting the citizen's entry and/or stay in the labor market, the Ministry of Health (MS), through Decree 279, on April 7, 1999, created the National Campaign of Elective Surgery, for patients with lower limb varicose veins, cataract, inguinal hernia and prostate diseases^{7,8}.

In order to mobilize more resources for these elective surgery campaigns, which were then considered strategic to the MS, the Strategic Actions and Compensation Fund (FAEC) was also created, through Decree 531, of April 30, 1999, which corresponded to 50% of unused resources from planned activities of certain programs9. Then, these health actions would be funded by resources other than the regular budget. That meant no prior planning imposing a monthly limit to the number of operations per hospital and region, and which bureaucratically created obstacles to authorization of admission for surgery (AIH)^{9,10}.

In Brazil, health resources follow rules of budget distribution to States (or Federation Units) and regions (in Brazil, the States or Federation Units are grouped into 5 regions) and are, in general, distributed according to the estimated average per capita cost, which constitutes the "ceiling cost", a factor that, theoretically, limits the health actions to a budget planning. Then, on September 1st, 2000, the MS, in a partnership with the Sociedade Brasileira de Angiologia e de Cirurgia Vascular, and through Decree 309, created the Technical Committee for Vein Varicose Surgery to manage and advertise the campaign^{7,10}.

The purpose of this study was to evaluate the results of the Ministry of Health's investment and the increase in the number of varicose vein operations performed by task force, after the creation of FAEC.

Method

A cross-sectional retrospective study was conducted, using the information available in the database of the Data Processing Department of the National Healthcare System (DATASUS). Data were accessed via internet, using the "Health Information" link at DATASUS website, which provides information about: number of procedures per admission unit, number of authorizations of admission paid by year/service according to the Federation Unit (UF), the total cost by year/service according to the Federation Unit (UF), and demographical and socioeconomic information of the resident population, by year according to the UF region. The study analyzed all AIHs for lower limb varicose vein surgery paid by the Brazilian Ministry of Health, according to consecutive data provided by DATASUS, from January 1998 to December 2004. The year of 1998 was established as the control year, as the campaign started in September 1999. This study was approved by the Research Ethics Committee of Universidade Estadual de Ciências da Saúde de Alagoas (UNCISAL), Protocol 260.

Results

A considerable increase in the number of varicose vein operations was observed in all regions of Brazil, from 1999 on, when the Campaign for Vascular Surgery Task Force started, if compared to 1988. In the Central-West region, in 2002, this number increased 15-fold, and in the other regions, such increase ranged from 4 to 5 fold (Figure 1).

Regarding the annual index of varicose vein operations/1,000 inhabitants, the Central-West region presented the best performance, followed by the South and Southeast regions. In the North region, this index was 0.2335 (76.29% increase), obtained in 2002, corresponding to 4.21 times more operations if compared to 1988; the Northeast region showed 0.3779 (75.26% increase), obtained in 2001. The index remained around 0.33 (71.67% increase) from 2002 to 2004, which corresponded to 4-fold increase in the number of operations. In the Southeast, the index was 0.6346 (69.50% increase), obtained in 2003, corresponding to approximately 3.28 times more operations. The South region showed 0.7606 (76.95% increase), obtained in 2003, an increase of 4.33 times if compared to 1988. In the Midwest region, this index was 1.2686 (92.79% increase), obtained in 2002, approximately 15-fold increase if compared to the control year (Figure 2).

In all Brazil in 1988, the MS investments totaled R\$5,819,033.27 in with lower limb varicose vein operations.

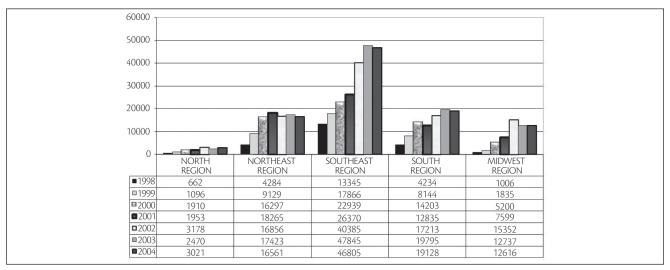


Figure 1. Total number of varicose vein operations performed by region/year.

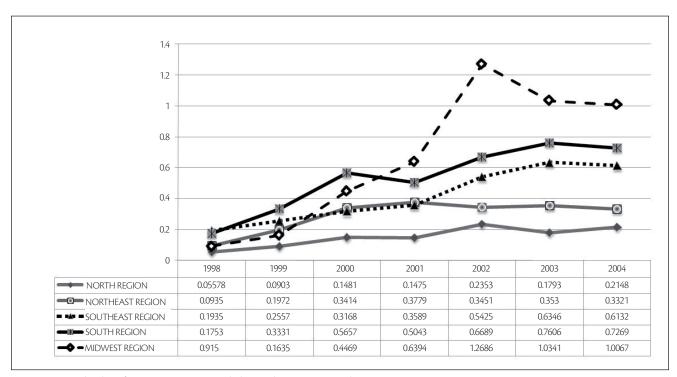


Figure 2. Annual index of operations per 1,000 inhabitants by region in Brazil.

After the implementation of the vascular surgery task force campaign, the investment in such operations was R\$ 43,787,806.85 in 2003 (Figure 3).

The highest investment in varicose vein operations was in the Southeast region in 2003 (R\$21,064,911.60) and the lowest in the North region (R\$1,395,965.31), in 2002. The Midwest, Northeast and South regions, from 2002 to 2004, received investments of around six, seven and eight million reais, respectively (Figure 4).

Discussion

With the implementation of the Elective Surgery Campaign in 1999, the MS seemed to have achieved some objectives, such as: reduced bureaucracy faced by the National Healthcare System (SUS) users to obtain the authorization for elective surgery procedures; increased offer of varicose vein operations, reducing the long waiting list; the campaign favored low-income population and finally

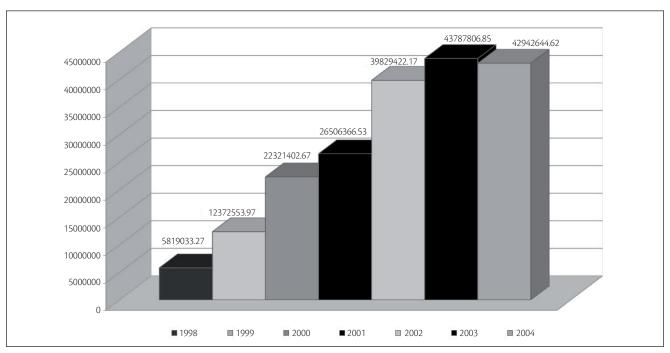


Figure 3. Total cost (in reais) of varicose vein operations in Brazil per year.

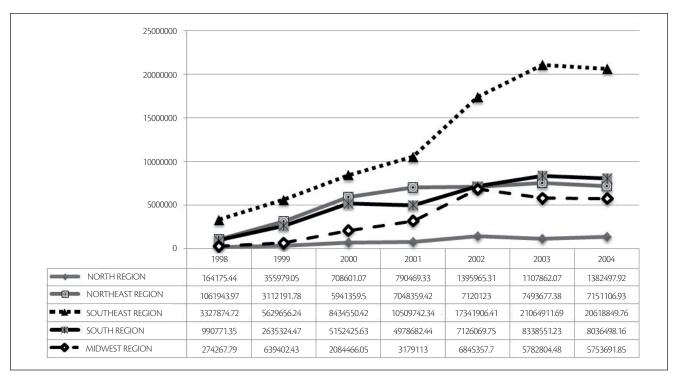


Figure 4. Total cost (in reais) of varicose vein operations by region in Brazil.

enhanced the access to hospital care. However, it should be noted that, after the involvement of vascular surgeons and, in particular, the support provided by Sociedade Brasileira de Angiologia e de Cirurgia Vascular, the incentive policy established with the task forces was effective and the amount of operations performed by SUS increased from a little more than 23,000 operations/year in 1998 to around 100,000 operations/year in 2004 $^{\!\scriptscriptstyle 11}$. Although the number of operations from DATASUS are official data from the government, they do not completely reflect the epidemiological

reality in Brazil, and may be often a result of selection bias that favored younger patients, clinical classes C2-C3, to the detriment of clinical classes C4-C6 (CEAP classification), which consequently requires medium and high complexity operations. On the other hand, the increased number of operations with the implementation of such task force model was clearly significant.

The socioeconomic cost of the health care to patients with venous disease caused by superficial venous system insufficiency (varicose veins), including absence from work, complications, clinical and surgical therapy, admissions, as well as investigation techniques, has made countries spend billions of dollars. Some European countries, such as the United Kingdom, France and West Germany, spend the estimated amount of 1.5 to 2.0% of their total health budget in the provision of medical and social support to venous disease, which corresponds, on average, and based on the exchange rate of 1992, from 418 to 1,135 million euros a year¹². In 1995, in Belgium, the average per capita cost of health insurance was estimated to be 40,092 Belgian francs, 39% of which spent with hospital expenses, 16.7% with drugs and 14.6% with outpatient care; but 85,320 Belgian francs were spent with 7,913 people submitted to lower limb varicose vein surgery, i.e., 2.13 times more than the average per capita cost initially calculated13.

In Brazil, the taxpayer will only have the right to receive benefits from the government's health insurance agency after having contributed to that for at least 12 months, and if the absence from work exceeds 15 days. Otherwise, the employer will be responsible for the health care cost. The MS spends approximately U\$ 1,000,000.00 (one million dollars) a year with the payment of benefits only². This amount does not include costs with hospital and outpatient care, medication and medical dressings performed at the public health facilities, absence from work and costs with the private health care system. This reason has encouraged government officers to pay more attention to venous diseases, which has been causing a serious social and public health problem.

Chronic venous disease is one of the most prevalent diseases in the world today and responsible for a significant impact on the patients' quality of life¹⁴. Estimates show that between 1 and 38% of men and between 1 and 61% of women have lower limb varicose veins. In Brazil, such prevalence may reach 50% of the population, being the 14th cause of absence from work and the 32nd cause of disability retirement^{2,15}.

In early 2006, the Federal Government changed the National Policy of Elective Surgery of Medium Complexity, doubling the resources to fund these procedures to 368 million reais and increasing the number of specialties included in the program¹⁶. After that change, 67 different types of procedures started to be funded by the FAEC. As around one third of all women in the world have varicose veins and the prevalence increases with the age and the incidence of new cases seems to be constant during adult life¹⁷, it is important to maintain the incentive policy established by the government to varicose vein surgery task forces to benefit all SUS users. However, despite the success achieved by the varicose vein surgery task forces, seven years after the campaign implementation, with more than two million operations performed, today these task forces have been forgotten and abandoned, and should, therefore, be reactivated with the support of Sociedade Brasileira de Angiologia e de Cirurgia Vascular.

It is well known that the surgical correction of superficial venous insufficiency functionally improves the deep venous system. Consequently, skin trophic lesions are reduced⁵ and these patients present clinical improvements, enabling them to return to their social and labor activities, contributing to reduced socioeconomic costs^{6,18}. For these reasons, higher investments in the surgical treatment of varicose veins are required to minimize or solve the problem.

Conclusion

With the increased investment of the Brazilian Ministry of Health in the implementation of elective surgery task forces through FAEC, a significant increase was observed in the number of varicose vein operations across Brazil.

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Author's contributions

Conception and design: MOS; JAA Analysis and interpretation: MOS; FMJ Data collection: MOS Writing the article: JAA Critical revision of the article: LFPF; GBBP Final approval of the article*: MOS; JAA; LFPF; GBBP; FMJ Statistical analysis: MOS Overall responsibility: MOS; JAA *All authors have read and approved the final version submitted at the J Vasc Bras.