

## Hospitalizations due to primary care sensitive conditions: assessment of prenatal and childbirth-related diseases

Internações por condições sensíveis à atenção primária: avaliação das doenças relacionadas ao pré-natal e parto

Interacciones con condiciones sensibles a la atención primaria: evaluación de las enfermedades relacionadas con la pre-natal y parto

Vanessa Aparecida Gasparin<sup>1</sup>; Daiane Broch<sup>2</sup>; Thaís Betti<sup>3</sup>

### How to cite this article:

Gasparin VA, Broch D, Betti T. Hospitalizations due to primary care sensitive conditions: assessment of prenatal and childbirth-related diseases. Rev Fun Care Online. 2019 jul/set; 11(4):1038-1042. DOI: <http://dx.doi.org/10.9789/2175-5361.2019.v11i4.1038-1042>.

### ABSTRACT

**Objective:** The study's purpose has been to assess hospital admission due to primary care sensitive conditions related to prenatal and childbirth diseases, after implementation of the Stork Network in the country. **Methods:** It is a descriptive and retrospective study, which was carried out based on the consultation of secondary data made available through the Department of Informatics from the *Sistema Único de Saúde (SUS)* [Unified Health System], named as *DATASUS*, over the period from 2011 to 2013. **Results:** During the study period there was an increase of 5,606 cases of hospital admission due to primary care sensitive conditions related to prenatal and childbirth diseases at the national level, and the most prominent region was the Southeast with 44,384 hospitalizations. This research presented an increasing index of hospitalizations due to primary care sensitive conditions related to prenatal and childbirth diseases even with the regulation of the Stork Network. **Conclusion:** The increase in hospitalizations demonstrates the challenges to be faced by primary care, aiming to reduce adversities considered avoidable.

**Descriptors:** Pregnant women, primary health care, health assessment.

### RESUMO

**Objetivo:** Analisar as internações por condições sensíveis à atenção primária, relacionadas às doenças do pré-natal e do parto no país após a implementação da Rede Cegonha. **Metodologia:** Estudo descritivo, retrospectivo, realizado a partir da consulta de dados secundários disponibilizados por meio do Departamento de Informática do Sistema Único de Saúde (SUS), durante os anos de 2011 a 2013. **Resultados:** No período estudado houve um acréscimo de 5.606 casos de internações por condições sensíveis à atenção primária relacionadas às doenças do pré-natal e parto a nível nacional, sendo que a região de maior destaque foi a sudeste com 44.384 hospitalizações. Esta pesquisa apresentou um índice crescente de internações por condições sensíveis à atenção primária por doenças relacionadas ao pré-natal e parto mesmo com a regulamentação da Rede Cegonha. **Considerações finais:** O aumento das internações demonstra os desafios a serem

- 1 Nursing Graduate by the Universidade Federal da Fronteira Sul (UFFS), MSc student of the Nursing Postgraduate Program at Universidade Federal do Rio Grande do Sul (UFRGS).
- 2 Nursing Graduate by the FURG, MSc student of the Nursing Postgraduate Program at UFRGS.
- 3 Nursing Undergraduate by the UFRGS.

enfrentados pela atenção primária, visando à redução de adversidades consideradas evitáveis.

**Descritores:** Gestantes, Atenção Primária à Saúde, Avaliação em Saúde.

## RESUMEN

**Objetivo:** Analizar las internaciones por condiciones sensibles a la atención primaria, relacionadas a las enfermedades del prenatal y parto en el país después de la implementación de la Red Cigüeña. Metodología: estudio descriptivo, retrospectivo, realizado a partir de la consulta de datos secundarios disponibles a través del Departamento de Informática del Sistema Único de Salud, durante los años de 2011 a 2013.

**Resultados:** En el período estudiado hubo un aumento de 5.606 casos de internaciones por condiciones sensibles a la atención primaria relacionada con las enfermedades del prenatal y parto a nivel nacional, siendo que la región de mayor destaque fue al sureste con 44.384 hospitalizaciones. Esta investigación presentó un índice creciente de internaciones por condiciones sensibles a la atención primaria por enfermedades relacionadas al prenatal y parto incluso con la reglamentación de la Red Cigüeña. **Consideraciones finales:** El aumento de las internaciones demuestra los desafíos a ser enfrentados por la atención primaria, visando la reducción de adversidades consideradas evitables.

**Descritores:** Mujeres Embarazadas, atención primaria de salud, evaluación en salud

## INTRODUCTION

Since the creation of the *Sistema Único de Saúde (SUS)* [Unified Health System], the healthcare scenario of the Brazilian population has undergone transformations in order to meet the needs of users in an effective way. There are several challenges to be overcome, especially regarding the consolidation of Primary Health Care (PHC) as the main gateway to SUS.<sup>1</sup> PHC is considered the first level of health care, able to solve up to 80% of health problems, providing comprehensive care to the population assigned to its territory.<sup>2,3</sup>

Aiming to increase the sustainability of PHC, the Family Health Strategy (FHS) was incorporated into the Brazilian health scenario, aiming at modifying the care model that had hitherto been in force, aiming at rationalizing care based on care levels, resulting in agility and quality of access to services.<sup>4</sup> Taking into account the purpose of evaluating actions carried out in PHC, a health indicator was developed, based on a list of 19 groups of causes and diagnoses based on the tenth revision of the International Classification of Diseases (ICD-10) and adapted the Brazilian epidemiological situation.<sup>3,5</sup>

This indicator emerged in the United States in the early 1990s and was named Ambulatory Care Sensitive Conditions (ACSCs).<sup>6</sup> Later it was translated and adapted to other countries, such as Brazil, where it is called Hospitalization by Primary Care Sensitive Conditions (HPCSC) and regulated by the Ministry of Health through Ordinance No. 221, dated April 17<sup>th</sup>, 2008.<sup>7</sup> The use of this indicator provides the permanent evaluation and monitoring of the health system through secondary data, becoming a tool for managing care in primary care.<sup>8,9</sup>

The purpose of using a national list of HPCSC is to assist in the evaluation of primary care and to compare its effectiveness among regions and even countries, through a

unified instrument, as well as to improve the planning and management of health services through National, State, and local managers.<sup>2</sup>

The HPCSC can be evaluated by analyzing the number of hospitalizations for conditions that could be resolved at the first level of care. High HPCSC rates may be reflective of difficulties related to access, coverage, or scarcity of resoluteness from the primary care, while health promotion, prevention, and rehabilitation actions are closely related to the high effectiveness of PHC and consequent reduction in hospitalization levels.<sup>3</sup>

Nevertheless, hospitalizations also result from other factors that are not easily measured. Bearing this in mind, the HPCSC indicator is an indirect PHC assessment tool, if we take into account the various factors that might be related to the occurrence of a hospitalization.<sup>2</sup>

Researches also point out that high rates of HPCSC can show a fragile organization of the health system, leading to deficiencies in preventive actions and early diagnosis.<sup>8</sup> Still, some authors defend the multifactorial origin of HPCSC, presenting besides the accessibility and effectiveness, social determinants of the locality as influencers in the hospitalization rates for these conditions.<sup>3</sup>

An integrative review of the literature concluded that in addition to PHC assessment, the HPCSC indicator can still aid decision making in order to qualify this level of attention, however, stresses the limitations of the indicator, as it is subject to underreporting and power.<sup>3</sup>

In Brazil, between 1998 and 2009, there were 34,304,012 HPCSC, of which 51.9% were women.<sup>6</sup> Research in the Rio Grande do Sul showed a superiority of 28% of HPCSC among women when compared to men.<sup>10</sup>

The last item on the HPCSC list, number 19, refers to prenatal and childbirth-related diseases, comprising three sub-items, urinary tract infection in pregnancy, congenital syphilis, and congenital rubella syndrome.<sup>7</sup>

Maternal and child health care has gained prominence in recent years on the national and global scene. The Millennium Development Goals (MDGs) set by the United Nations have recently been closed, with two priority objectives being addressed in two of the eight objectives.<sup>11</sup> Maternal and child health is also emphasized by the Health Agreement regulated in 2006.<sup>12</sup> And the most contemporary initiative to this population was the regulation and implementation of the Stork Network, which aims to provide health, quality of life and well-being during gestation, childbirth and postpartum through an articulated network of care organized into four components: prenatal, childbirth and childbirth, puerperium period, and integral attention to the child's health and logistic system.<sup>13</sup>

Given the ascendancy of strategies aimed at qualifying the assistance provided to this public and the national regulation of the Stork Network, it is questioned: Are women receiving a more comprehensive and qualified care during pregnancy, thus reducing the HPCSC due to prenatal and childbirth-related diseases?

Considering the aforementioned, the present study becomes relevant when analyzing whether the strategy focused

on the qualification of women's health in the pregnancy cycle, is achieved the goals it has proposed and being effective in the care given to this public, thus reducing hospitalization rates resulting from adversities that can and should be diagnosed and treated early by PHC. It is worth mentioning that the results can demonstrate failures in this level of care and in the professionals who work in it, as is the case of nursing, demonstrating the need for updates so that these professionals can provide resolution to the problems brought by pregnant women in the territory.

Taking into account the first two components of the Stork Network, and the Brazilian list of HPCSC, this study targets to assess hospital admission due to primary care sensitive conditions related to prenatal and childbirth diseases, after implementation of the Stork Network in the country.

## METHODS

It is a descriptive and retrospective study, which was carried out based on the consultation of secondary data made available through the Department of Informatics from the SUS, named as DATASUS.

Taking into account that the portal only provides data until the year 2013, the period of analysis included the years 2011, year of implementation of the Stork Network, to 2013.

The data search by State was done in the following order: access to DATASUS through the link: <http://tabnet2.datasus.gov.br/cgi/deftohtm.exe?idb2013/d32.def> in the Line field the item "Federative Unit" was selected, in the Column field "Not active" was selected, in the Content field "Intern CSAB - group19" was selected, and in the Available Periods field "2011,2012,2013" was selected. The search for regions followed the same order, using in the Line field the item "Region" and in the Column field the item "Year". Access to the portal for information acquisition was made in July 2017.

The data analysis comprised the descriptive analysis, through the description of absolute and relative frequencies.

This study was not submitted to a Research Ethics Committee because it is a public domain data.

## RESULTS

It can be seen in **Table 1** that in the period between 2011 and 2013 there were an increase of 5,606 cases of HPCSC related to prenatal and childbirth diseases at the national level. In the same period the region that stood out the most with the quantitative was the Southeast region with 44,384 HPCSC.

**Table 1** - Hospital admission due to primary care sensitive conditions related to prenatal and childbirth diseases, by regions from 2011 to 2013.

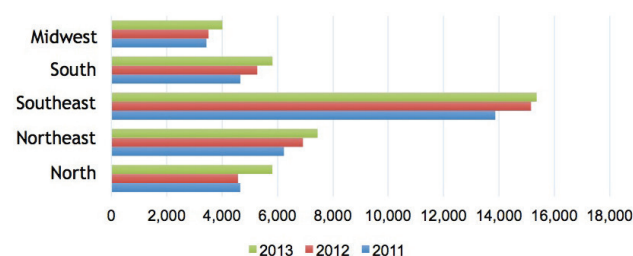
Region	n (%)			Total n (%)
	2011	2012	2013	
North	4,655 (30.9%)	4,572 (30.4%)	5,815 (38.7%)	15,042 (100%)
Northeast	6,233 (30.2%)	6,919 (33.6%)	7,448 (36.2%)	20,600 (100%)

Region	n (%)			Total n (%)
	2011	2012	2013	
Southeast	13,867 (31.2%)	15,157 (34.2%)	15,360 (34.6%)	44,384 (100%)
South	4,658 (29.6%)	5,269 (33.5%)	5,820 (36.9%)	15,747 (100%)
Midwest	3,433 (31.4%)	3,508 (32.0%)	4,009 (36.61%)	10,950 (100%)
<b>Total</b>	<b>32,846</b>	<b>35,425</b>	<b>38,452</b>	

Source: DATASUS, 2017.

**Figure 1** shows a gradual increase by regions over the years, except for the North region that showed a decrease from 2011 to 2012, yet, the indexes in 2013 have increased, following the national standard.

**Figure 1** - Hospital admission due to primary care sensitive conditions related to prenatal and childbirth diseases, by regions from 2011 to 2013.



Source: DATASUS, 2017.

When categorized by federative unit, as shown in **Table 2**, the most presenting HPCSC related to prenatal and childbirth diseases, over the period from 2011 to 2013 were the States of *São Paulo* (n = 23,242), followed by *Rio de Janeiro* (n = 11,943) and *Minas Gerais* (n = 7,221). While the States of *Amapá* (n = 316), *Paraíba* (n = 465) and *Acre* (n = 641) showed the lowest rates of HPCSC in the same group and period.

**Table 2** - Hospital admission due to primary care sensitive conditions, by federative unit from 2011 to 2013.

Federative Unit (State)	n
<i>Rondônia</i>	1,919
<i>Acre</i>	641
<i>Amazonas</i>	3,637
<i>Roraima</i>	821
<i>Pará</i>	6,490
<i>Amapá</i>	316
<i>Tocantins</i>	1,218
<i>Maranhão</i>	1,033
<i>Piauí</i>	1,139
<i>Ceará</i>	3,950
<i>Rio Grande do Norte</i>	704
<i>Paraíba</i>	465
<i>Pernambuco</i>	5,439
<i>Alagoas</i>	2,022
<i>Sergipe</i>	1,107
<i>Bahia</i>	4,741
<i>Minas Gerais</i>	7,221
<i>Espírito Santo</i>	1,978
<i>Rio de Janeiro</i>	11,943

Federative Unit (State)	n
São Paulo	23,242
Paraná	5,633
Santa Catarina	3,989
Rio Grande do Sul	6,125
Mato Grosso do Sul	2,129
Mato Grosso	2,285
Goiás	3,636
Distrito Federal	2,900
<b>Total</b>	<b>106,723</b>

Fonte: DATASUS, 2017.

## DISCUSSION

Herein, contrary to what was expected, presented an increasing rate of HPCSC due to prenatal and childbirth-related diseases in the period from 2011 to 2013, even with the regulations of the Stork Network. However, this index continues to increase over time in the country. A similar result was found in a study that aimed to describe the trend of hospitalizations for conditions sensitive to primary care between 1998 and 2009, which observed an increase in hospitalizations due to conditions related to prenatal care and childbirth between the years mentioned above.<sup>6</sup>

Women in the pregnancy cycle are at higher risk for hospitalization for conditions that are sensitive to PHC when compared to the other groups on the HPCSC list.<sup>14</sup> A study carried out in *Campo Grande* city (State of *Mato Grosso do Sul*) also demonstrated ancestry in the HPCSC in the group of prenatal care and childbirth during the period from 2000 to 2009. This study also presented the indices for each of the three problems that encompass the group, and the infection in the urinary tract in pregnancy increased from 42 to 70 cases, congenital syphilis of none case for 18 and congenital rubella syndrome that did not present registered cases for 46 cases during the period.<sup>8</sup>

Research conducted in the interior of São Paulo still showed that the age group most affected by HPCSC due to prenatal and childbirth-related diseases in the period 2008-2010 were pregnant women within the age group from 15 to 19 years old.<sup>9</sup>

Results point to the Southeast region, although small in territory, the most populous, with the highest HPCSC index due to prenatal and childbirth-related diseases, more than double compared to other regions of the country. There are possible causes for this exorbitant data, such as non-adherence in the period of the states and municipalities of the Stork Network, the low coverage of the territories resulting in pregnant women who are not accompanied in the prenatal or the low adherence of the same ones to him, or it is still thought of ineffective treatments, resulting from inadequate adherence on the part of the pregnant woman and also by her partner, as in the case of syphilis.<sup>15</sup>

In 2014, HPCSC due to prenatal and childbirth-related diseases accounted for 25,893 hospitalizations, with the Southeast region holding almost 50% of these cases (12,480). Comparing this data, with the results of this study there is a reduction of more than 10,000 hospitalizations between

the years of 2013 and 2014, which could be the result of an effective prenatal care, but as the methodologies and sources of search were not the same, precedents are opened to bias this statement.<sup>1</sup>

Corroborating with the Southeast indices, a study carried out in *Minas Gerais* identified that HPCSC related to gestation and childbirth in 2011 accounted for 15% of hospitalizations, leaving behind only neoplasms and diseases of the circulatory system.<sup>16</sup>

One factor that may explain the high levels of HPCSC is the devaluation of PHC, which results from a mistaken view of its complexity and scope, generating a greater scarcity of resources at this level.<sup>4</sup> In order to combat this, then support should be obtained from other health, in addition to sectors of the social and economic scope, aiming that this intersectoral articulation positively reflects the tenacity of PHC and consequently in reducing hospitalization rates for conditions that should be solved and accompanied by this level of attention.<sup>3</sup>

Despite increasing efforts to ensure effective and qualified maternal and child health care, as is the intention of the Stork Network, it is worth evaluating how such actions are reaching the target population.

The increase of HPCSC related to prenatal and childbirth diseases demonstrates the challenges to be faced by the PHC and prenatal coverage, aiming to reduce adversities considered avoidable. Primary care needs to be organized in a tenacious way, in order to provide effectiveness in actions directed toward pregnant women.<sup>17</sup>

It should be underlined that in this study has shown the raw data, therefore, the population difference between the regions directly influences the number of cases, which does not necessarily mean that these indices are due to either less coverage or disqualified prenatal care, however, it not possible to disregard this situation.

## FINAL CONSIDERATIONS

HPCSC rates due to prenatal and childbirth-related diseases remain in the ascendancy, even after a government strategy aimed at ensuring more qualified and effective assistance to this population.

It is known that despite six years after the regulation of the Stork Network, not all Brazilian municipalities have adhered to the proposal, perhaps, for this reason, the results of this study do not demonstrate a reduction in the rates of hospitalizations due to prenatal and childbirth-related diseases. Nonetheless, it should be pointed out that long before the regulation of this action, the prenatal care should already be effectively provided to combat the problems that could affect the pregnant woman in order to avoid hospitalizations due to these sensitive conditions, which was not happening, as demonstrated by the studies brought to discuss this article.

The present study presents some limitations, such as the under-notifications that guide a system such as *DATASUS*, which may generate a misleading view of the country's indexes, as well as the absence of data after 2013, which limits the actual performance of the strategy studied.

It is suggested that future researches study this group of the Brazilian HPCSC list in more recent years, seeking to verify if this population is still affected by hospitalizations that could be prevented through the primary level of health care, as well as to segment the health issues of the group, aiming to verify the one of highest prevalence.

## REFERENCES

1. Pereira FJR, Silva CC da, Lima Neto EA. *Perfil das Internações por Condições Sensíveis à Atenção Primária subsidiando ações de saúde nas regiões brasileiras*. *Saúde Debate*[on-line].2015 [citado em 10 jun 2017]; 39(107): 1008-17. Available at: <http://www.scielo.br/pdf/sdeb/v39n107/0103-1104-sdeb-39-107-01008.pdf>
2. Alfradique ME, Bonolo PF, Dourado I, Lima Costa MF, Macinko J, Mendonça CS et al. *Internações por condições sensíveis à atenção primária: a construção da lista brasileira como ferramenta para medir o desempenho do sistema de saúde (Projeto ICSAP – Brasil)*. *Cad Saúde Pública*[on-line]. 2009 [citado em 10 jun 2017]; 25(6): 1337-49. Available at: <http://www.scielo.br/pdf/csp/v25n6/16.pdf>
3. Deininger LSC, Silva CCS, Lucena KDT, Pereira FJR, Neto EAL. *Internações por condições sensíveis à atenção primária: revisão integrativa*. *Rev EnfermUfpe*[on-line]. 2015 [citado em 10 jun 2017]; 9(1): 228-36. Available at: <https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/10329/11023>
4. Costa JSD, Pattussi MP, Morimoto T, Arruda JS, Bratkowski GR, Sopelsa M et al. *Tendência das internações por condição sensível à atenção primária e fatores associados em Porto Alegre, RS, Brasil*. *Ciênc saúde coletiva*[on-line].2016 [citado em 20 jul 2017];21(4): 1289-96. Available at: <http://www.scielo.br/pdf/csc/v21n4/1413-8123-csc-21-04-1289.pdf>
5. Pazó RG, Frauches DO, Molina MDCB, Cade NV. *Modelagem hierárquica de determinantes associados a internações por condições sensíveis à atenção primária no Espírito Santo, Brasil*. *Cad Saúde Pública* [on-line]. 2014[citado em 20 jul 2017];30(9): 1891-902. Available at: <http://www.scielo.br/pdf/csp/v30n9/0102-311X-csp-30-9-1891.pdf>
6. Boing AF, Vicenzi RB, Magajewski F, Boing AC, Moretti-Pires RO, Peres KG et al. *Redução das Internações por Condições Sensíveis à Atenção Primária no Brasil entre 1998-2009*. *Rev Saúde Pública*[on-line]. 2012 [citado em 20 jul 2017]; 46(2): 359-66. Available at: <http://www.scielo.br/pdf/rsp/v46n2/3709.pdf>
7. Brasil. Ministério da Saúde. Portaria nº 221, de 17 de abril de 2008. Publica na forma do Anexo desta Portaria, a Lista Brasileira de Internações por Condições Sensíveis à Atenção Primária, 2008.
8. Campos AZ de; Theme-Filha MM. *Internações por condições sensíveis à atenção primária em Campo Grande, Mato Grosso do Sul, Brasil, 2000 a 2009*. *Cad Saúde Pública* [on-line]. 2012[citado em 29 jul 2017]; 28(5): 845-55. Available at: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0102-311X2012000500004](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2012000500004)
9. Ferreira JBB, Ferreira JBB, Borges JG, Santos LL, Forster AC. *Internações por condições sensíveis à atenção primária à saúde em uma região de saúde paulista, 2008 a 2010*. *Epidemiol Serv Saúde*[on-line]. 2014 [citado em 10 ago 2017];23(1): 45-56. Available at: [http://scielo.iec.pa.gov.br/scielo.php?script=sci\\_arttext&pid=S1679-49742014000100005](http://scielo.iec.pa.gov.br/scielo.php?script=sci_arttext&pid=S1679-49742014000100005)
10. Nedel FB, Facchini LA, Martín-Mateo M, Vieira LAS, Thumé E. *Programa Saúde da Família e condições sensíveis à atenção primária, Bagé-RS*. *Rev Saúde Pública* [on-line]. 2008[citado em 10 ago 2017]; 42:1041-52. Available at: [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0034-89102008000600010](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-89102008000600010)
11. ONU. Organização das Nações Unidas. Tradução - Centro Regional de Informações das Nações Unidas (UNRIC). *Relatório sobre os Objectivos de Desenvolvimento do Milénio 2010*. Instituto de Estudos para o Desenvolvimento (IED). Brasília: Ministério da Educação, 2010.
12. Brasil. Ministério da Saúde. Portaria nº 399, de 22 de fevereiro de 2006. Divulga o Pacto pela Saúde 2006 – Consolidação do SUS e aprova as Diretrizes Operacionais do Referido Pacto, 2006.
13. Brasil. Ministério da Saúde. Portaria nº 1.459, de 24 de junho de 2011. Institui no âmbito do SUS, a Rede Cegonha, 2011.
14. Pitilin EB, Gutubir D, Molena-Fernandes CA, Pelloso SA. *Internações sensíveis à atenção primária específicas de mulheres*. *Ciênc saúde coletiva*[on-line]. 2015 [citado em 02 set 2017];20(2): 441-8. Available at: <http://www.scielo.br/pdf/csc/v20n2/1413-8123-csc-20-02-0441.pdf>
15. IBGE. Instituto Brasileiro de Geografia e Estatística. Censo 2010. Available at: <http://censo2010.ibge.gov.br/>.
16. Cardoso CS, Pádua CM, Rodrigues-Júnior AA, Guimarães DA, Carvalho SF, Valentin RF et al. *Contribuição das internações por condições sensíveis à atenção primária no perfil das admissões pelo sistema público de saúde*. *Rev Panam Salud Publica*[on-line]. 2013 [citado em 08 set 2017];34(4): 227-34. Available at: <http://www.scielosp.org/pdf/rpsp/v34n4/03.pdf>
17. Pitilin EB; Pelloso SM. *Internações sensíveis à atenção primária em gestantes: fatores associados a partir do processo da atenção pré-natal*. *Texto Contexto Enferm* [on-line]. 2017 [citado em 08 set 2017];26(2): 1-10. Available at: [http://www.scielo.br/pdf/tce/v26n2/pt\\_0104-0707-tce-26-02-e06060015.pdf](http://www.scielo.br/pdf/tce/v26n2/pt_0104-0707-tce-26-02-e06060015.pdf)

Received in: 03/10/2017

Required revisions: did not have

Approved in: 17/01/2018

Published in: 01/07/2019

**Corresponding author**

**Daiane Broch**

**Address:** Rua Miguel Tostes, nº 905, 33A,

Porto Alegre, Brazil

**Zip Code:** 90.430-061

**Telephone number:** +55 (54) 9 9623-7960

**E-mail address:** daiane\_broch@hotmail.com

**Disclosure: The authors claim to have no conflict of interest.**