

# Health problems in a population registered at the family health strategy: the community health agent as the key informant

## *Problemas de saúde em população cadastrada na estratégia saúde da família: o agente comunitário de saúde como informante-chave*

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### ABSTRACT

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**Objective:** to identify the main health problems in the territories of the Family Health Strategy in the view of communitarian agents of health from Montes Claros, Minas Gerais, Brazil. **Methods:** this was a quantitative, transversal, and census based study. The data collection took place through a semi-structured questionnaire applied to community health agents (CHA) linked to the Family Health Strategy. The research was approved by the Research Ethics Committee from the Montes Claros State University (Unimontes) under the protocol number 1966-10. **Results:** 241 agents participated in the study. The majority (97.5%) declared knowing the health situation in the territory. Regarding the most common health problems in the community, agents pointed out diseases of the respiratory system (82.40%) in children, chemical dependency (23.56%) in adolescents; and hypertension in adults and elders, in 77.25% and 79.16%, respectively. **Conclusion:** most community health agents know the health situation of the territories in which they operate. The identification of the main health problems was highlighted according to the cycle of life of the population. The local diagnosis from the CHA, as key informants, contributes to set priorities and establish goals and objectives for tackling problems in the territories of Family Health.

**Key words:** Family Health; Primary Health Care; Public Health.

### RESUMO

**Objetivo:** identificar os principais problemas de saúde nos territórios da Estratégia Saúde da Família na visão dos agentes comunitários de saúde de Montes Claros, Minas Gerais, Brasil. **Métodos:** o desenho do estudo é transversal, quantitativo e censitário. A coleta de dados deu-se por meio de questionário semiestruturado aplicado aos agentes comunitários de saúde (ACS) vinculados à Estratégia Saúde da Família. A pesquisa foi aprovada pelo Comitê de Ética em Pesquisa da Universidade Estadual de Montes Claros (Unimontes), sob o parecer número 1.966-10. **Resultados:** participaram do estudo 241 agentes comunitários de saúde. A maioria (97,5%) declarou conhecer a situação de saúde do território. Em relação aos problemas de saúde mais comuns na comunidade adscrita, os agentes destacaram, nas crianças, as doenças do sistema respiratório (82,40%); nos adolescentes, a dependência química (23,56%); e nos adultos e idosos, a hipertensão arterial foi a mais destacada, 77,25% e 79,16%, respectivamente. **Conclusão:** a maioria dos agentes comunitários de saúde conhece a situação de saúde dos territórios onde atua. A identificação dos principais problemas de saúde foi destacada conforme o ciclo de vida da população. O diagnóstico local a partir do ACS, como informante-chave, contribui para definir as prioridades e estabelecer objetivos e metas para o enfrentamento dos problemas nos territórios de Saúde da Família. **Palavras-chave:** Saúde da Família; Atenção Primária à Saúde; Saúde Pública.

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## INTRODUCTION

The Family Health Strategy (FHS), initially called Family Health Program, was formalized as an institutional proposal in 1994 within the framework of the Unified Health System (SUS) to mainly strengthen actions of prevention and health promotion.<sup>1</sup>

The FHS has multi-professional teams composed according to the teams' modalities with doctors, nurses, dental surgeons, oral health assistants or technicians, nursing assistants or technicians, and community health agents (CHAs) among other professionals depending on the epidemiological and institutional reality and the health needs in the population. One FHS team is responsible for monitoring up to 4,000 people, with the recommendation of 3,000 on average. The number of CHAs must not exceed 12 per team, and each professional CHA must be responsible for up to 750 people.<sup>2</sup>

The Family Health Strategy organizes the work according to the population's health situation, in the respective territory, through actions directed to the promotion of health, prevention of diseases, and treatment of health problems. The community health agent is the professional responsible for the registration of families and surveys for the socio-economic and epidemiological profiles of the territory under his responsibility.<sup>1</sup> Thus, the CHA has an important role in the family health team characterized as a key informant for the local diagnosis in FHS territories.

Considering the importance of situational diagnoses for the Family Health Strategy in consolidation with SUS, this study aimed to identify the major health problems in the territories of family health in the view of community health agents, in the head-quarter city for the health macro-region in Northern of Minas Gerais, Brazil.

## METHODS

This research was conducted under the Program in Education for the Work for Health (PET-Health) from the Montes Claros State University (Unimontes) and the Municipal Health Secretary of Montes Claros-MG.

This was a cross-sectional quantitative study with a census approach. The proposal was developed by the community health agents linked to family health at the urban area in the municipality in Northern Minas Gerais, Brazil, in 2010. The participants' potential for this study was of 259 CHAs, i.e. the totality of

professionals in this category distributed, at the time, among 49 teams from the Family Health Strategy and 15 strategy teams of community health agents. The number of CHAs distributed by team shows the average of four professionals.

The municipality scenario in this study presents a population around 361,915 thousand inhabitants. It has the features of a regional capital, ranked as the fifth urban center in Minas Gerais.

A semi-structured questionnaire was used as data collection instrument, applied at health units, the workplace of CHAs. The questionnaire was designed to meet the objectives of the study from the bibliographical research and involved questions about the thematic of health situation in the studied areas. Initially, a pilot study was conducted to test the instrument for data collection with the participation of 10 CHAs. Because reformulation and adaptation of the questionnaire was not needed, the respondents in the pilot step were included in the study.

The data were analyzed in the SPSS version 18.0° program. Measures of central tendency were used for the descriptive analysis: mean, standard deviation, minimum and maximum values and quartiles, and calculation of proportions. The Fisher's test was used for association between variables considering the significance level of  $p < 0.05$ .

The study was approved by the Committee of Ethics in Research, protocol No. 1966/2010, in accordance with resolution 196/96 from the National Health Council. Signed Volunteer and Informed Term of Consent forms were obtained from all participants prior to data collection.

## RESULTS

A total of 241 community health agents were interviewed representing 93.0% of all family health-related professionals in the studied municipality. The majority of interviewees (79.3%) were females. According to the interviewees, the population registered in the territory of family health under their responsibility ranged from 110 to 5,000 people, with an average of 2,717.34 ( $\pm 1440.10$ ) and the 25% percentile corresponding to 2,000 people, median of 3,000, and 75% percentile of 4,000 registered individuals.

The vast majority (97.5%) of professionals stated knowing the health situation in their working territory without significant difference between

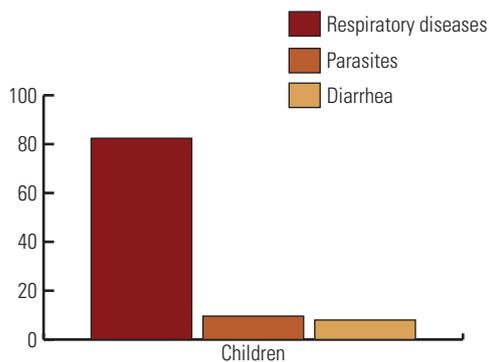
genders ( $p = 0.607$ ) (Table 1). The main health problems in different the life phases of childhood, adolescence, adulthood, and aging were highlighted by the CHAs.

**Table 1** - Distribution of participants according to gender knowledge if the health status in the population registered in the family health territory – Montes Claros, MG – Brazil, 2010

		Do you know the health status in the population in your territory?		
		Yes	No	Total
Gender	Female	187 97,9%	4 2,1%	191 100,0%
	Male	48 96,0%	2 4,0%	50 100,0%
Total		235 97,5%	6 2,5%	241 100,0%

Fisher's test -  $p > 0.05$

For most interviewees (82.4%), respiratory system diseases were the most prevalent in the registered children in their working area (Figure 1).

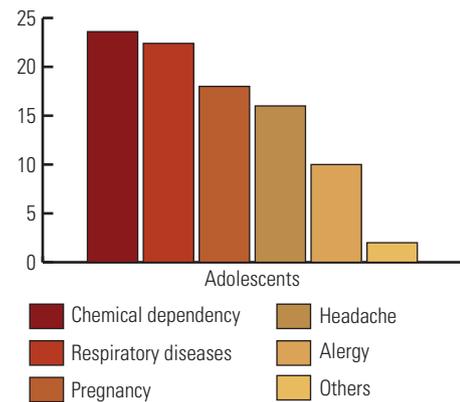


**Figure 1** - Percentage distribution of CHAs according to perception of the most prevalent health problems in children registered in the family health territories – Montes Claros, MG – Brazil, 2010.

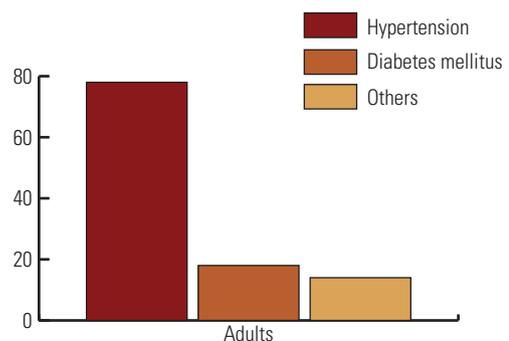
In adolescents, chemical dependency was highlighted by 23.6% of interviewees, followed by respiratory diseases (22.4%) (Figure 2).

The most prevalent health problem in adults and elderly was hypertension (77.3% and 80.0 %, respectively) (Figure 3 and 4, respectively). The majority of CHAs (98.7%) reported knowing the main challenges to be faced in their working territories. The challenges identified were: lack of population awareness about the importance of seeking a better

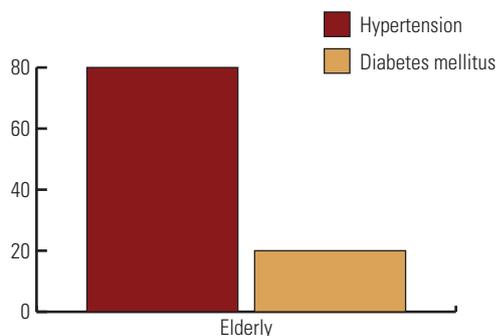
quality of life and take responsibility for their own health (22.3%), difficulty of dealing with illicit drug users (12.9%), and lack of community participation (9.4%) in the actions proposed by the health team in the family health territory. Other challenges, to lesser percentages, were highlighted as low socio-economic power in the community; lack of adequate infrastructure in the territory, which hinders the access to registered households; inadequate physical structure of the health unit; difficulty in complying with the targets imposed by managers, and incomplete family health team work, in addition to difficulty in finding people at home during household visits. Household visits were the most outstanding work highlighted by community health agents (93.6%), followed by the provision of health guidelines (6.4%) to the community.



**Figure 2** - Percentage distribution of CHAs according to perception of the most prevalent health problems in adolescents registered in the family health territories – Montes Claros, MG – Brazil, 2010.



**Figure 3** - Percentage distribution of CHAs according to perception of the most prevalent health problems in adults registered in the family health territories – Montes Claros, MG – Brazil, 2010.



**Figure 4** - Percentage distribution of CHAs according to perception of the most prevalent health problems in elderly registered in the family health territories – Montes Claros, MG – Brazil, 2010.

## DISCUSSION

In this study, the average number of people registered in the territories of family health presented an approximate value to that recommended by the Ministry of Health, with 3,000 inhabitants and a maximum of 4,000 people<sup>2</sup>, corresponding to the result from the vast majority. It is worth mentioning that one territory is divided into micro-areas, places of the CHAs' performance being responsible for an average of 150 families, namely 750 people. In this study, we observed great numerical variation in populations under the responsibility of CHAs, from 110 to 5,000 people. To explain this result, it has been hypothesized that there was a lack of understanding about the issue by some professionals who considered the number of families in their responses compared to those who considered the total population registered in the territory of family health.

The community health agent is responsible for monitoring and registering all families living in his working area (micro-area) through monthly home visits. In addition to the visits, the professional develops actions for disease prevention and health promotion, works with specific groups (hypertension, infant vaccination), and guides the population regarding conducted health campaigns.<sup>3</sup>

The vast majority of agents, regardless of gender, stated knowing the health situation in the territory under their responsibility; most could mention the most prevalent problem in the different life phases: childhood, adolescence, adulthood, and aging. Diseases of the respiratory system were highlighted as the most frequent problem in children. The highest frequency of respiratory system diseases in childhood was also identified in another study conducted with mothers

in an FHS in the State of Paraná.<sup>4</sup> Among respiratory diseases are, basically, asthma and acute infections of the airways. These are identified in about 60% of all pediatric outpatient consultations at the health services and characterized by several signs and symptoms such as fever, stuffy nose, runny nose, cough, sore throat, shortness of breath, and wheezing.<sup>5</sup>

In adolescents, the most prevalent health problem was chemical dependency, followed by respiratory diseases, pregnancy, headaches, allergies, and sexually transmitted diseases (STDs). Adolescence is a phase of personality development and requires physical and psychological changes, which often lead to individual and/or family conflicts. The use of drugs in this phase may be due to a search for relief and pleasure and a way to deal with an alleged suffering because the adolescent wants to discover his limits. This is a phase of risk for chemical dependency and loss of control over their own deeds and wills.<sup>6</sup>

Illicit drug consumption among young people is a public health concern and requires attention despite that few studies have highlighted the importance of protective factors. A research conducted with young people at risk of drug use reported that the availability of information was considered the main factor of protection against the experimental and regular consumption of drugs. Family base information was reported as the primary source.<sup>7</sup> Therefore, the National Research of School Health (PeNSE) conducted in Brazil with 60,973 students in public and private schools concluded that family plays an important protective role for the habits of drinking, smoking, and drug use.<sup>8</sup>

As for the CHAs in this scenario, they act as key informants in the health team because they integrate the community through home visits. Thus, he has the role to survey information to support health diagnosis and planning for individual and collective health actions. However, if the CHA is not trained to deal with problems involving illicit drugs, such as how to approach users and follow up on identified cases, he may feel limited in the role of informant. The thematic on use of illicit drugs and high consumption of alcohol is considered a taboo despite being part of the daily life in many communities, and, therefore, little is discussed on this subject. Besides, the problem with drug use involves other issues such as lawlessness activity and criminal groups. Thus, the agent may feel inhibited to reference identifiable cases to other professionals in the health team.

In spite of all problems involving the world of drugs, CHAs remain as the health team support be-

cause they are the link between abusive drug and alcohol users. Therefore, the health team should be prepared for necessary confidentiality regarding information passed on by the CHAs and the adoption of identity protection resources for this informant. The ethical stand by the team will contribute towards proactive attitudes by CHAs and reduction of taboo omissions. Thus, with social responsibility and collective reflection, the whole family health team can manage the problem in the best way possible with the community in the pursuit of solutions that add value to the collective health. However, the search for solutions or easing of problems of illicit drugs and alcoholism must involve different social sectors because these are also social problems.

The abuse of chemicals in childhood and adolescence is the result of the complex interaction of individual and social factors. Thus, global programs are necessary to reach the problem and not those limited to aspects of adolescence lifestyle.<sup>9</sup> Inter-sectorial actions are important for solving public health problems such as chemical dependency. The chemical dependency requires effort from both the State and society in general, implementing measures with a resolution to this serious public health problem.

In this study, headaches were highlighted as a problem in adolescents in the family health territory. This result is consistent with that reported in a study conducted in Spain, with children and adolescents, indicating stomach pain, followed by headaches as the main physical complaints.<sup>9</sup> Pregnancy and sexually transmitted diseases were highlighted problems in adolescence. These problems are complex challenges, requiring social intervention and sexual education campaigns with reproductive approach to promote health among young people.

The most prevalent health problems in adults and the elderly were hypertension and diabetes mellitus (DM). The Brazilian Ministry of Health reported that these two conditions are considered the main risk factors for worsening cardiovascular diseases, the main cause of morbidity and mortality in the Brazilian population. Among the adult Brazilian population, older than 20 years old, hypertension affects about 20% of people and has about 80% relationship with cerebrovascular accident (CVA). The incidence of diabetes mellitus is increasing every day and it is estimated that in 2025 the number of people with the disease will increase 100% compared to the year 2000, with 5 million people affected in Brazil.<sup>10</sup>

In general, the health problems reported by CHAs according to life phases are consistent with the results found in the literature review. In this review, the biggest problems were malnutrition, acute respiratory diseases, and parasitic diseases in children; in adolescents, the problems were related to the use of alcohol and drugs and increased early pregnancy; in adults, the identified problem was hypertension.<sup>11</sup>

In this study, most agents reported knowing the major challenges in their micro-area of work. The territorialization process allows community health agents to recognize local health problems such as the lack of basic sanitation, outbreak of infectious and contagious diseases like dengue fever and leishmaniasis, sexual and domestic violence, teen pregnancy, and drug trafficking among others.<sup>12</sup> The recognition of problems requires intervention when problems are characterized as challenges to be faced in the community. The biggest challenges in the working territories were highlighted often as those related to co-responsibility of the population with their own health, participation of individuals in community actions, and work involving drug users.

In another study, violence and drug trafficking problems were highlighted by community health agents. The professional pretends not to see these situations based on fear of reprisals against themselves and their families.<sup>13</sup> The challenges found in the work of CHAs require creativity to improve tackling obstacles.<sup>14</sup>

Accountability of the population for self-care is an important challenge to be faced and needed to improve the health condition of the population. Another study evaluated the efficacy of pharmacotherapy in the treatment of chronic diseases, hypertension, and diabetes in those registered in family health and concluded that changes in pharmacotherapy are insufficient for the adequate control of diseases, necessitating the development of interventions by the health team in promoting the practice of self-care by individuals and their families.<sup>15</sup> The monitoring of users to prevent the complications of chronic diseases and obtain a high level of quality of life should be emphasized, not only for the pharmacological treatment but also for changes in lifestyle through health education for self-care.<sup>16</sup>

The socio-economic problems in the population registered in the territories were also a challenge highlighted by the agents. This is a challenge of difficult confrontation that hypothetically negatively influences the health condition in the population and worsens some conditions such as diabetes. In agree-

ment with this hypothesis, a study analyzed the socioeconomic differences in diabetes mortality burden in a Finnish population with ages between 35 and 80 years. The study concluded that diabetes is unevenly distributed in that population. In patients with low socioeconomic status, higher prevalence of diabetes was observed with high rates of complications and mortality.<sup>17</sup> Hence, there is a need for monitoring population groups affected by diabetes that are in a state of social and economic vulnerability. Therefore, the domiciliary visit conducted by CHAs can be considered fundamental to monitor health/disease conditions in this population group.

Another research reports that home visits were considered important practice by the subjects enrolled in the family health territory to recognize the health in the population and facilitate access to health services. The household was considered an important site to recognize and develop health actions for the whole family.<sup>18</sup> Therefore, the hypothesis in this study is that domiciliary visits held by most agents have created favorable conditions to know about the main problems in the working micro-area. Hence, CHAs can be considered as key informants for the local diagnosis in the territories of family health coverage.

The community health agent is a link between the community and health teams. The community health agent activities according to the Ministry of Health are: use of instruments for the demographic and socio-cultural diagnoses in the community under his responsibility; implementation of health education activities at the individual and collective levels; record of births, deaths, illnesses, and health complications; stimulate community participation in public policies; conduct periodic household visits; and participate in or promote actions that strengthen the links between the health sector and other public policies that promote quality of life.<sup>19</sup> Accordingly, the CHA's role in the diagnosis of health in the population is of paramount importance to the performance of work by family health teams.

One of the limitations in this study was because it was a cross-sectional study; therefore, the results presented concern to the assessed period only. Hypotheses were raised in an attempt to explain the obtained results; however, these are untested hypotheses that could guide further studies by the FHS. The study was based on a census approach showing low percentage of losses (7.0%), which makes the results representative of the studied municipality.

## CONCLUSIONS

The vast majority of CHAs declared knowing the health situation in the territory under their professional responsibility. Different health problems were identified according to life phases in the population. In children, respiratory problems were the most common; in adolescents, the use of illicit drugs; and in adults and elderly, high blood pressure. The local diagnosis, through an agent as a key informant, contributes to set priorities and establish goals and objectives for the confrontation of problems in the territories of family health.

The diversity and complexity of challenges reinforce the need for multidisciplinary teamwork and inter-sectorial actions for the resolution or alleviation of the various problems presented by community health agents in the territories of family health.

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## REFERENCES

1. Filgueiras AS, Silva ALA. Agente comunitário de saúde: um novo ator no cenário da saúde do Brasil. *Physis*. 2011; 21(3):899-916.
2. Brasil. Ministério da Saúde. Portaria nº 2.488, de 21 de outubro de 2011. Aprova a Política Nacional de Atenção Básica, estabelecendo a revisão de diretrizes e normas para a organização da Atenção Básica para o Programa Saúde da Família (PSF) e o Programa Agentes Comunitários de Saúde (PACS) [internet]. República Federativa do Brasil; 2011 out 21. [Citado em 2012 jan 11]. Disponível em: <http://www.brasilsus.com.br/legislacoes/gm/110154-2488.html>
3. Pavoni DS, Medeiros CRG. Processos de trabalho na equipe Estratégia de Saúde da Família. *Rev Bras Enferm*. 2009; 62(2):265-71.
4. Castilho SG, Bercini LO. Acompanhamento de saúde da criança: concepções das famílias do município de Cambira, Paraná. *Ciênc Cuidado Saúde*. 2005; 4(2):129-38.

5. Minas Gerais. Secretaria de Estado da Saúde. Atenção à saúde da criança. Maria Regina Viana. Belo Horizonte: SAS/DNAS; 2005.
6. Scaduto AA, Barbieri V. O discurso sobre a adesão de adolescentes ao tratamento da dependência química em uma instituição de saúde pública. *Ciênc Saúde Coletiva*. 2009; 14(2):605-14.
7. Sanchez ZM, de Oliveira LG, Ribeiro LA, Nappo SA. O papel da informação como medida preventiva ao uso de drogas entre jovens em situação de risco. *Ciênc Saúde Coletiva*. 2011; 16(1):1257-66.
8. Malta DC, Porto DL, Melo FCM, Monteiro RA, Sardinha LMV, Lessa BH. Family and the protection from use of tobacco, alcohol, and drugs in adolescents, National School Health Survey. *Rev Bras Epidemiol*. 2011; 14(1):166-77.
9. Molinero O, Salguero A, Castro-Piñero J, Mora J, Márquez S. Substance abuse and health self-perception in Spanish children and adolescents. *Nutr Hosp*. 2011; 26(2):402-9.
10. Brasil. Ministério da Saúde. Manual de Hipertensão arterial e Diabetes mellitus. Brasília (DF): Ministério da Saúde; 2002.
11. Westphal MF, Bógus CM, Faria MM. Grupos focais: experiências precursoras em programas educativos em saúde no Brasil. *Bol Oficina Sanit Panam*. 1996; 120(6):472-82.
12. Nascimento EPL, Correa CRS. O agente comunitário de saúde: formação, inserção e práticas. *Cad Saúde Pública*. 2008; 24(6):1304-13.
13. Galavote HS, Prado TN, Maciel ELN, Lima RCD. Desvendando os processos de trabalho do agente comunitário de saúde nos cenários revelados na Estratégia Saúde da Família no município de Vitória (ES, Brasil). *Ciênc Saúde Coletiva*. 2011; 16(1):231-40.
14. Gomes KO, Cotta RMM, Mitre SM, Batista RS, Cherchiglia ML. O agente comunitário de saúde e a consolidação do Sistema Único de Saúde: reflexões contemporâneas. *Physis*. 2010; 20(4):1143-64.
15. Zavatini MA, Obreli-Neto PR, Cuman RKN. Estratégia saúde da família no tratamento de doenças crônico-degenerativas: avanços e desafios. *Rev Gaúcha Enferm*. 2010; 31(4):647-54.
16. Arruda-Barbosa L, Dantas TM, Oliveira, CC. Estratégia Saúde da Família: avaliação e motivos para busca de serviços de saúde pelos usuários. *Rev Bras Prom Saúde*. 2011; 24(4):347-54.
17. Manderbacka K, Peltonen R, Koskinen S, Martikainen P. The burden of diabetes mortality in Finland 1988-2007 - A brief report. *BMC Public Health*. 2011; 11:747.
18. Mandú ENT, Gaíva MAM, Silva MA, Silva AMN. Visita domiciliária sob o olhar de usuários do programa saúde da família. *Texto Contexto Enferm*. 2008; 17(1):131-40.
19. Brasil. Decreto nº 3189, de 4 de outubro de 1999. Fixa diretrizes para o exercício da atividade de Agente Comunitário de Saúde (ACS), e dá outras providências [internet]. República Federativa do Brasil; 1999 out. 4. [Citado em 2011 ago 22]. Disponível em: [http://www.planalto.gov.br/ccivil\\_03/decreto/D3189.htm](http://www.planalto.gov.br/ccivil_03/decreto/D3189.htm).