DOI: 10.4025/cienccuidsaude.v14i3.22934

QUALITY OF NURSES IN FAMILY HEALTH AND QUALITY OF CARE FROM THE PERSPECTIVE OF USERS

Carla Silvana Oliveira e Silva*
Adélia Dayane Guimarães Fonseca**
Luís Paulo Souza e Souza***
Leila das Graças Siqueira****
Dulce Aparecida Barbosa*****

ABSTRACT
The study aimed to evaluate the relationship between qualification of nurses in Primary Health Care – APS (Family Health) - and quality of care from the perspective of users. Cross-sectional and quantitative study, conducted with 373 adults service users and 78 nurses, in Montes Claros, Minas Gerais-Brazil, using Primary Care Assessment Tool adult version. The services of APS whose professionals had residence showed higher scores for the majority of attributes evaluated and statistical differences for the attributes of accessibility, longitudinality, coordination, integrality of services available, family counseling and community, as well for the essential score. As for the demographic profile, academic and occupational nurses, were statistically significant differences between the scores assigned to the academic training (graduate or not) and time in service. The qualification of nurses in primary health care can bring forward in assisting of the APS, being positive factor in improving the model of health care.

Keywords: Family health. Primary health care. Nurses. Qualification. Program evaluation.

INTRODUCTION

The Primary Health Care - APS - is an important issue when discussing the theme public health, and has been the subject of studies and scientific production in several parts of the world, standing out in Brazil. Consequently, the evaluation of services provided by the Family Health Strategy teams becomes the subject of most attention, since it is a subject to continuous improvements of the Primary Health Care process[1].

In Brazil, the implementation of the Unified Health System - SUS - universalized access to health services and defined APS as a way and main strategy to achieve the goal of "Health for All", set in Alma-Ata in 1978 . Moreover, it argues that the prioritization of APS reaffirms the need to break with the biomedical model, centered in medical consultation and emergency room visits[1-3]. The new proposal emphasizes health promotion and disease prevention and treatment of diseases and health recovery. In this respect, in order to implement the process of reorganization of the healthcare practice, the Family Health Strategy - ESF, called before as the Family Health Program, has been adopted since 1994 by the Ministry of Health as the reorganization of primary care model, that emerged from the successful experience with the Program of Community Health Agents - PACS, created in 1991[2].

It is noteworthy that, since the Alma-Ata Conference in 1978, several authors have proposed definitions of Primary Health Care. Renewed Primary Health Care[4], according to the Pan American Health Organization -OPAS-, should be the basis of national health systems, to be considered the most effective strategy to produce sustainable improvements and greater equity in health status of the population.

From this perspective, the APS can be defined as a set of values - right to the highest attainable standard of health, solidarity and equity; as a set of principles - government

*Graduação em Enfermagem, Doutora em Ciências, Docente na Universidade Estadual de Montes Claros –UNIMONTES. E-mail: carlasosilva@ig.com.br
**Graduação em Enfermagem, Mestranda em Ciências da Saúde (UNIMONTES) – Docente nas Faculdades Santo Agostinho de Montes Claros, MG. E-mail: adeliadayane@yahoo.com.br
***Graduação em Enfermagem, Mestre em Enfermagem (UFMG). E-mail: Luis.pauloss@hotmail.com
****Graduação em Enfermagem, Doutoranda em Ciências da Saúde (UNIMONTES), Docente na Universidade Estadual de Montes Claros – UNIMONTES. E-mail: leilasiqueirasantos@yahoo.com.br
*****Graduação em Enfermagem, Pós-Doutora em Nefrologia, Docente na Universidade Federal de São Paulo– UNIFESP. E-mail: dulce.barbosa@unifesp.br

accountability, sustainability, cross-sectoral approach, social participation, among others; as an inseparable set of structural elements - attributes - the health care system: first contact access, integrality, longitudinality, coordination, family and community guidance and cultural competence[5-6]. In recent years, especially in Brazil, APS operational definition has been widely used, including by the Ministry of Health. From this definition, it can be conceptualized the four key attributes of primary care services: first contact access to the individual to the health system; longitudinality, that is the existence of a continuous source of care, as well as its use over time; integrality: range of services available and provided by the primary care service and coordination of care, which requires some form of continuity of care by the same professional. Moreover, the presence of three other characteristics, called as derived attributes, qualify the actions of primary care services: health care centered on the family (family-oriented); community guidance and cultural competence: Provider adaptation (staff and health professionals) to the special cultural characteristics of the population, to facilitate the relationship and communication with it[4].

It is a fact that health services are organized from a structured of a APS in accordance with their ordering attributes, more effective and better[7-8]. Despite the importance of well-trained professionals to the consolidation of the new model of care, national literature still records a few studies in the area. Thus, there is the need to know the impact of training and professional qualification on the development of the attributes of ps[7-8].

Thus, in order to add the qualification of the worker to the improvement of health services by keeping them according to local contexts and needs, the ESF has required training at postgraduate level for the responsible exercise of the usual practices of this area[7].

In this context, the Brazilian scenario consider the training of health professionals through three types of broad sense postgraduate courses: medical residency, which is exclusive to the medical professional; the specialization courses open for several health courses; and multidisciplinary residences, to the specialization of different top-level health workers[9].

Experiments promoted by residencies may represent the best opportunity for a reflection about alternatives to review the paths to the training of professionals with a view to a more coherent work, proposed by the ESF. Specializations in residence mode are designed to provide theoretical and practical support to professionals already working in teams and to offer, especially the graduates of medical schools and nursing, a more focused training to the needs of the ESF[10-11].

Therefore, this study aimed to investigate the relationship between professional training of nurses in Primary Health Care (Family Health) and quality of care, from the perspective of users.

METHODS

It is cross-sectional analytical study with a quantitative approach. The study was conducted in the city of Montes Claros, in the north of Minas Gerais - Brazil, in the first half of 2013. The city has an estimated population of over 365 thousand people. As for Primary Health Care services, the city had at the time of data collection, 76 family health teams (10 located in rural areas and 66 in urban areas), one health unit with the Community Health Agents program (PACS) and 15 health centers responsible for the care of people without ESF coverage.

It is noteworthy that the city has an Integrated Program of Residence in Family and Community Medicine/Specialization Course in Family Health Residence mode for Nurses and Surgical-Dentist. It is a partnership between the Ministry of Health, State University of Montes Claros and the Municipal City Hall/Health Department, focused on the professional qualification to work in the area of primary health care[12].

In this sense, it was sought to verify the aps attributes in teams with qualified professionals without specific qualifications, using the Primary Care Assessment Tool (PCA-Tool), developed in the US by Starfield and already validated in Brazil[13]. This tool has separate questions, aimed at gauging the aps attributes

from care to adults and children. In this study, we opted for the use of questions related to adult care. For data collection and verification of scores of attributes, the target population of this study consisted of users of APS services (ESF or other services). For logistical reasons, only health teams ESF located in the urban area were including, with operation for at least one year from the beginning of data collection, aiming to incorporate data from a greater temporal contact between the population and health services.

The sample calculation was based on a finite population, specifically the city of Montes Claros; therefore, it was a random, casual and simple sampling process. The eligibility criteria of the subjects to the questionnaire were to be user for more than a year of APS services (ESF or other services), and be 18 years old. The sample calculation defined the need for allocation of 373 users, considering a sampling error of 5% and 95% confidence level, from a prevalence of the studied event of 50% (using the health service). This value is usually taken as a conservative estimate, as it increases the sample number.

The analyzed sample of health professionals consisted of nurses that in the selected APS units, assisted adults and fulfilled $\geq$ 20 hours per weel, therefore in a sample for convenience. The sample consisted of 78 professionals.

In order to characterize the sample of professionals, a structured questionnaire with socio-demographic questions was used relating to academic and occupational situations. Two trained interviewers (nurses) made the questionnaire. The same area coordinator performed training and systematic monitoring of interviewers.

In this study, the quality of health care is being understood as the presence and extent of considered essential attributes and derivatives of APS, proposed by Starfield in their his (14). The PCA Tool measures the presence and extent of each attribute of APS through Likert scale ("definitely yes", "probably yes", "probably not", "definitely not" and "I do not know/do not remember"), building scores in the range of 1 to 4 for each attribute. For analysis purposes, the answers marked in "I do not know/do not remember" were considered "probably not"[14].

Scores for the essential attributes were recorded, "first Contact", "longitudinality", "coordination", "integrality", and the derived attributes, "family-guidance" and "community-guidance". The tool evaluates the structure and process of care about each APS attribute in a given service[14]. However, with regard to "coordination", there were obtained scores for its components separately, so that the score for "coordination system information" evaluated the structure involved with this attribute, while the score for "coordination of care" considered the process. Similarly, the score for "integrality services" measured the structure of the services involved with this attribute, and the score for "integrality services", measured the process. The scores were obtained by the arithmetic mean of the items that compose them. Similarly, the Essential Scores and General APS were obtained respectively, by the arithmetic average of the scores of the essential attributes and scores for all attributes. The values obtained for each score on the Likert scale were converted to a scale of zero to ten, with scores equal to or greater than 6.6 indicate an adequate length of each attribute.

To compare teams with residence (nurses qualified by residence) and without residence (not enabled by nurse residence), the mean scores were analyzed using the "t" test of Student; and for analysis of proportions, we used the chi-square test. The significance level was 5% ($p < 0.05$). For these consolidations, the software Statistical Package for Social Sciences (SPSS) 18.0 was used.

The study project was approved by the Ethics Committee of the Federal University and São Paulo (UNIFESP), in the opinion number 110290/2012. Respondents were informed about the aims and methods of the research and signed the Informed Consent Form.

RESULTS AND DISCUSSION

The nurses involved in the study were an average of 34.38 years old (SD=5.5). With regard to the training of these professionals, it was observed that 66.2% (n=52) were just undergraduates, while 33.8% (n=26) had title

graduate. Only 23 (29.5%) had specific training (specialization or residency in family health).

It was identified that 40 (51.3%) of respondents had an operating time in the team of not more than three years. As for the hours worked per week, 97.2% had a workload equal to or less than 40 hours per week, and just 50% of professionals reported a monthly income less than or equal to R$ 3,400.00, while the other part (50%) reported a higher income. In addition, 35.9% of them had another occupation.

Table 1 expresses the scores of APS attributes measured from the perception of users of APS respondents. These scores were compared between the services in which professionals (nurses) had the Multidisciplinary Residency in Family Health and those APS services where professionals did not have such training. The observed scores show that, in general, APS services whose professionals have residence had higher scores for most of the evaluated attributes and with statistically significant differences for the attributes of accessibility, longitudinality, coordination (information system), integrality of services, family and community guidance, as well as to the essential score.

Table 1. Scores of attributes of Primary Health Care, measured from the perception of respondents users. Montes Claros, 2012.

APS Attributes	Professional without Residency or specialization in Family Health	Professional with residency or specialization in Family Health	
	Average±SD	Average±SD	p
Accessibility	4,0±1,5	4,2±0,9	0,000
Longitudinality	6,9±1,4	6,9±0,9	0,040
Coordination – Integrality care	6,5±1,4	6,5±1,5	0,438
Coordination- Information System	8,1±1,4	7,9±1,3	0,000
Available services	7,1±1,1	7,5±1,2	0,000
Integrated services	7,5±1,2	7,9±1,3	0,000
Family guidance	8,0±1,7	8,3±1,6	0,000
Community guidance	7,4±1,4	7,9±1,4	0,000
Essential score	6,7±0,9	7,1±0,7	0,003
General score	6,6±0,9	6,8±0,7	0,123

In Table 2, there is the socio-demographic, academic and occupational professionals presented with the proportions of evaluations with high and low general scores for each variable analyzed, especially statistically significant differences between the scores attributed to academic training (graduate or not) (p=0.044) and time of performance in APS service (p=0.025).

With regard to socio-demographic profile of nurses, a research conducted in Brazil[15] found 36.6% of nurses in the average age of more than 29 years old, different from the present study findings (average 34.38 years old).

Before the ESF, training for the health area was strictly directed to the clinic, and consequently the area of work was a hospital, with well-defined areas of wards and beds. Trying to reverse the hegemonic model of care - hospital-centered and medical-centered, and the construction of the APS areas as strategy, currently graduates of health courses, especially Nursing, Medicine and Dentistry, the first job was sought in an ESF[16]. This may explain the findings of this study, found that most professionals (66.2%) active were only undergraduates.

However, the results presented show that the primary care services that have professionals with multidisciplinary residency in family health, perform better in the evaluation of the APS attributes. These results support what other authors[7,10-12,17] explained

in other studies about the need for training of human resources with technical and political and cultural knowledge, so that the changes in the care production health be truly effective. APS services are configured as a way to the Unified Health System (SUS), incorporating the basic principles of teamwork, building relationships and responsibility between people and professionals. Thus, health professionals working in APS should be in possession of specific knowledge of this area.

Table 2. Socio-demographic profile, academic and occupational professionals, with the proportions of evaluations with high and low general scores for each variable analyzed. Montes Claros, 2012.

	Low general score (< 6,6)		High general score (>=6,6)		
Variable	n	%	n	%	p
Age					0,590
Less or equal to 34	08	40,0	23	39,7	
Older than 34	12	60,0	35	60,3	
Skin color					
White	01	5,3	00	0,0	0,256
Black	01	5,3	03	5,9	
Brown	17	89,5	48	94,1	
Income					0,397
Less ore qual to 3400	09	45,0	29	51,8	
More than 3400	11	55,0	27	48,2	
Education					0,044
Graduate	10	47,4	16	27,6	
Complete Higher Education	09	52,3	42	72,3	
With residency or specialization in Family Health					0,153
No	14	82,4	38	65,5	
Yes	03	17,6	20	34,5	
Time working at ESF					0,025
Less or equal to 3	06	30,0	24	41,4	
More than 3	14	70,0	34	58,6	
Work hours					0,465
Less ore qual to 40 hours	19	95,0	54	98,2	
More than 40 hours	01	5,0	01	1,8	
With other professional occupation					0,503
Yes	10	50,0	19,0	33,9	
No	10	50,0	37,0	66,1	

The acting in the APS requires a diversity of knowledge and practices in areas related to health management, care of families, individuals and populations, the management of the determinations and social consequences, to the territory of operation, the conceptions and practices health-knowledge that often are not offered during graduation. Thus, the professional with training in Residence mode in Family Health, characterized by the teaching service and the great time practice charge, is likely to have more clarity their work objects in the area of Family Health, Public Health, Collective Health, Planning, Popular Education and Health Promotion[17]. Thus, the SUS implementation process, directed by its principles and the concept of health as social production, is the reframing context of nurses´ work in the context of primary health care[17]. It is worth noting that among the different health areas of activity, the Family Health Strategy (ESF) provides opportunities a privileged space for the differentiated application of the care practices[18].

In this perspective, the analysis of one attribute of the APS, from the perception of the APS users, showed better scores for teams with better training (residence), with statistically significant differences in the accessibility attributes (p=000) longitudinality (p=0.040), coordination-information system (p=0.000) integrated and available services (p=0.000), as well as family and community guidance (p=0.000).

Accessibility reports on access to services, the biopsychosocial range of health actions available in many moments of the health-disease process, as well as the community inclusion and its relationship with users. The continuity of care, mutual trust service-user, the user´s connection with the service and health professionals, is expressed by longitudinality. As for the coordination attribute, it reveals the primary care provider´s ability to integrate all care the patient receives through coordination between departments. Finally, the Family Guidance (or health care centered on the family) implies the consideration by those who work in the APS, the family context and its potential (as much care as the health threat) in the assessment of individual needs to provide integral care[19].

The analysis of the attributes through the vital score, also records that the ESF teams in which there are professionals with specific training had adequate score ($\geq$6.6) with statistically superior difference to teams that do not have this professional (p=0.003). This reinforces the words of scholars in the area[11], which state that experiences, especially in multidisciplinary homes, rather than in their own expertise, may represent an organized opportunity for reflection on alternatives to review the way for the training of professionals with a view to a more integrated work team, more effective exchange of knowledge and practices, resulting in greater satisfaction for users.

Moreover, some limitations may be recognized in this study, similar to PCA Tool with some limitations. The first one is to consider, for the calculation of Essential and General Scores, that the attributes have the same "weight" as the APS guidance. The second one is the fact that the study is conducted in only one city. Finally, the APS was evaluated from the perspective of users, and some authors[18] point out that there is some "natural" for the low quality, from users recognizing the service received as a favor or gift and not as a right, which is one of the different interpretations for a free service. Moreover, this is an evaluation research, cross-sectional, subject to the limitations of this type of project.

CONCLUSION

The findings in this study reveal that APS services that have professionals with multidisciplinary residency in family health perform better in the evaluation of the APS attributes made by users. Based on the data, it is undeniable the contribution which the qualification brings to the quality of care.

The Brazilian health system, in its current conformation, requires the formation of increasingly capable and qualified professionals, aiming to overcome the biologicist paradigm and seek the promotion of actions for care to new and complex health needs of the population. Thus, the scientific and cultural development becomes necessary to any professional regardless of their area or job function.

Given the above, it is understood that this evaluation process must be continuous, and their results, added and compared with those of other evaluative dimensions, in order to collect subsidies for the provision of quality services to the population. It is known that the transformation of training and practice is a challenge to be overcome in many instances, implying paradigm changes already structured in services, in educational institutions and in interpersonal relationships.

QUALIFICAÇÃO DE ENFERMEIROS EM SAÚDE DA FAMÍLIA E QUALIDADE DA ATENÇÃO NA ÓTICA DE USUÁRIOS

RESUMO

O estudo objetivou avaliar a relação entre qualificação de enfermeiros em Atenção Primária à Saúde – APS (Saúde da Família) - e qualidade da atenção sob a ótica de usuários. Estudo transversal, quantitativo, realizado com 373 adultos usuários do serviço e 78 enfermeiros, em Montes Claros, Minas Gerais-Brasil, utilizando questionário *Primary Care Assessment Tool* versão adulto. Os serviços da APS cujos profissionais possuíam residência apresentaram escores maiores para maioria dos atributos avaliados e diferença estatística para os atributos da acessibilidade, longitudinalidade, coordenação, integralidade de serviços disponíveis, orientação familiar e comunitária, e para o escore essencial. Quanto ao perfil sócio-demográfico, acadêmico e ocupacional dos enfermeiros, destacaram-se diferenças estatisticamente significativas entre os escores atribuídos à formação acadêmica (pós-graduação ou não) e tempo de atuação no serviço. A qualificação do enfermeiro em Atenção Primária à Saúde pode trazer avanços na assistência prestada, sendo fator positivo na melhoria do modelo de atenção à saúde.

Palavras-chave: Saúde da família. Atenção primária à saúde. Enfermeiros. Qualificação profissional. Avaliação de programas e projetos de saúde.

CUALIFICACIÓN DE ENFERMEROS EN SALUD FAMILIAR Y CALIDAD DE LA ATENCIÓN EN LA PERSPECTIVA DE LOS USUARIOS

RESUMEN

El estudio tuvo el objetivo de evaluar la relación entre cualificación de enfermeros en la Atención Primaria a la Salud– APS (Salud de la Familia)- y la calidad de la atención desde la perspectiva de los usuarios. Estudio transversal, cuantitativo, desarrollado con 373 adultos usuarios de este servicio y 78 enfermeros, en Montes Claros, Minas Gerais-Brasil, utilizando *Primary Care Assessment Tool* versión adulto. Los servicios de la APS cuyos profesionales poseían residencia médica presentaron resultados mayores para la mayoría de los atributos evaluados y diferencia estadística a los atributos de accesibilidad, longitudinalidad, coordinación, integralidad de los servicios disponibles, orientación familiar y comunitaria, y para el resultado esencial. En cuanto al perfil sociodemográfico, académico y profesional de los enfermeros, se destacaron las diferencias estadísticamente significativas entre los resultados aportados a la formación académica (posgrado o no) y el tiempo que actúa en el servicio. La calificación del enfermero en la Atención Primaria a la Salud puede traer avances en el cuidado prestado, siendo un factor positivo para mejorar el modelo de atención a la salud.

Palabras clave: Salud de la familia. Atención primaria a la aalud. Enfermeros. Cualificación profesional. Evaluación de programas y proyectos de salud.

REFERENCES

1. Castro RCL, Knauth DR, Harzheim E, Hauser L, Duncan BB. Avaliação da qualidade da atenção primária pelos profissionais de saúde: comparação entre diferentes tipos de serviços. Cad Saúde Pública. 2012; 28(9):1772-84.

2. Gomes KO, Cotta RMM, Araújo RMA, Cherchiglia ML, Martins TCP. Atenção Primária à Saúde - a "menina dos olhos" do SUS: sobre as representações sociais dos protagonistas do Sistema Único de Saúde. Ciênc saúde coletiva. 2011; 16(Suppl 1): 881-92.

3. Coelho MMF, Miranda KCL, Bezerra STF, Guedes MVC, Cabral RL. Supervisão como tecnologia para a melhoria da atenção básica à saúde. Rev Rene. 2012; 13(3):704-11.

4. Organização Panamericana de Saúde. *La renovación* de la Atencion Primaria de Salud em lãs Américas. Washington (DC): Organização Panamericana de Saúde; 2005.

5. Starfiel B. Primary Care: Concept, evaluation and Policy. New York: Oxford University Press; 1992.

6. Cunha EM, Giovanella L. Longitudinalidade/continuidade do cuidado: identificando dimensões e variáveis para a avaliação da Atenção Primária no contexto do sistema público de saúde brasileiro. Ciên Saúde coletiva. 2011; 16(suppl.1):1029-42.

7. Batista KBC, Gonçalves OSJ. Formação dos profissionais de saúde para o SUS: significado e cuidado. Saúde Soc. 2011; 20(4):884-99.

8. Costa SM, Prado MCM, Andrade TN, Araújo EPP, Silva Junior WS, Gomes Filho ZC et al. Perfil do profissional de

nível superior nas equipes da Estratégia Saúde da Família em Montes Claros, Minas Gerais, Brasil. Rev Bras Med Fam Comunidade. 2013 abr-jun; 8(27):90-6.

9. Campos FE, Aguiar RAT. A expansão da atenção básica nas grandes cidades e a especialização em saúde da família como estratégia para sua viabilidade. In: Brasil. Ministério da Saúde (MS). Secretaria de Gestão do Trabalho e da Educação na Saúde. Cadernos RH Saúde 3(1). Brasília (DF): Ministério da Saúde; 2006. p. 97-102.

9. Castro RCL, Diercks MLMS, Corrêa FA, Gyrão NB, Pekelman R, Umpierre RN. O programa teórico da Residência em Medicina de Família e Comunidade do serviço de Saúde Comunitária do Grupo Hospitalar Conceição, Porto Alegre, RS. Rev Bras Med Fam Comunidade. 2014;9(33):375-83.

10. Haddad MCFL. A residência de enfermagem na formação profissional. Cienc Cuid Saude [on line]. 2012 [citado em 5 jan 2014]; 11(2):223-5. Disponível em: URL http://eduem.uem.br/ojs/index.php/CiencCuidSaude/article/viewFile/20051/pdf

11. Leão CDA, Caldeira AP. Avaliação da associação entre qualificação de médicos e enfermeiros em atenção primária em saúde e qualidade da atenção. Ciênc saúde coletiva. 2011; 16(11):4415-23.

12. Harzheim E, Starfield B, Rajmil L, Álvarez-DardetC, Stein AT. Consistência interna e confiabilidade da versão em português do Instrumento de Avaliação da Atenção Primária (PCATool-Brasil) para serviços de saúde infantil. Cad Saúde Pública. 2006; 22(8):1649-59.

13. Starfield B. Atenção Primária: equilíbrio entre necessidades de saúde, serviços e tecnologia. Brasília (DF): Unesco; 2002.

14. Machado MH. Perfil dos médicos e enfermeiros do Programa Saúde da Família no Brasil: relatório final Região Nordeste. Brasília (DF): Ministério da Saúde; 2000.

15. Neto FRGX, Sampaio JJC. Gerentes do território na Estratégia Saúde da Família: análise e perfil de necessidades de qualificação. Rev bras enferm. 2007; 60(6):687-95.

16. Ceccim RB, Feuerwerker LCM. Mudança na graduação das profissões de saúde sob o eixo da integralidade. Cad Saúde Pública. 2004; 20(5):1400-10.

17. Kebian LVA, Oliveira SA. Práticas de cuidado de Enfermeiros e Agentes Comunitários de Saúde da Estratégia Saúde da Família. Cienc Cuid Saude. 2015; 14(1):893-900.

18. Mesquita Filho M, Luz BSR, Araújo CS. A Atenção Primária à Saúde e seus atributos: a situação das crianças menores de dois anos segundo suas cuidadoras. Ciênc saúde coletiva. 2014; 19(7):2033-46.

Corresponding author: Carla Silvana Oliveira e Silva. Rua Guarani, 191, Cep: 39401-508, Bairro Melo. Montes Claros – Minas Gerais, Brasil. E-mail: carlasosilva@ig.com.br

Submitted: 20/02/2014
Accepted: 10/06/2015