



PREVENTIVE PROFILE OF CERVICAL CANCER IN NURSING WORKERS PERFIL PREVENTIVO DO CÂNCER DE COLO UTERINO EM TRABALHADORAS DA ENFERMAGEM

PERFIL PREVENTIVO DEL CÁNCER DE CUELLO UTERINO EN TRABAJADORAS DE LA ENFERMERÍA

Renata Santos Carvalho¹, Rosa Martha Ventura Nunes², Josseana Dias de Oliveira³, Rejane Marie Barbosa Davim⁴, Erta Soraya Ribeiro César Rodrigues⁵, Priscilla Costa Melquíades Menezes⁶

ABSTRACT

Objective: to describe the preventive profile of cervical cancer in nursing workers. **Method:** this is a descriptive and exploratory study with a quantitative approach with 34 nursing professionals. The technique of data collection was through individual interviews, with the help of a structured form, and the data was analyzed and discussed based on the literature. **Results:** there was a predominance of nursing techniques from 30 to 39 years old, single, working 30 hours a week. Most of the professionals reported having knowledge about cervical cancer and underwent cytopathological examination about 1 year ago. **Conclusion:** the preventive profile of cervical cancer in nursing workers showed a positive behavior in the prevention of the disease. Understanding the influential aspects in adherence to the cytopathological examination is essential for achieving the reduction, incidence, and mortality from this type of cancer. **Descriptors:** Uterine Cervical Cancer; Prevention; Nursing.

RESUMO

Objetivo: descrever o perfil preventivo do câncer de colo uterino em trabalhadoras da Enfermagem. **Método:** estudo descritivo, exploratório, com abordagem quantitativa, com 34 profissionais de enfermagem. A técnica de coleta de dados foi por meio de entrevistas individuais, com auxílio de um formulário estruturado e os dados analisados e discutidos à luz da literatura. **Resultados:** houve predominância de técnicas de enfermagem dos 30 aos 39 anos, solteiras, trabalhando 30 horas semanais. A maioria das profissionais relatou ter conhecimento sobre câncer de colo uterino e realizado o exame citopatológico há cerca de 1 ano. **Conclusão:** para o perfil preventivo do câncer de colo uterino em trabalhadoras da enfermagem, constatou-se comportamento positivo em relação à prevenção da doença. Compreender os aspectos influenciadores na adesão ao exame citopatológico é essencial para o alcance da redução, incidência e mortalidade por esse tipo de câncer. **Descritores:** Câncer de Colo Uterino; Prevenção; Enfermagem.

RESUMEN

Objetivo: describir el perfil preventivo del cáncer de cuello uterino en trabajadoras de la Enfermería. **Método:** estudio descriptivo, exploratorio con enfoque cuantitativo, con 34 profesionales de enfermería. La técnica de recolección de datos fue por medio de entrevistas individuales, con auxilio de un formulario estructurado, y los datos analizados y discutidos en base a la literatura. **Resultados:** hubo predominancia de técnicas de enfermería de los 30 a los 39 años, solteras, trabajando 30 horas semanales. La mayoría de las profesionales relataron tener conocimiento sobre cáncer de cuello uterino y realizado el examen de citología vaginal hace cerca de 1 año. **Conclusión:** para el perfil preventivo del cáncer del cuello uterino en trabajadoras de la enfermería se constató comportamiento positivo en relación a la prevención de la enfermedad. Comprender los aspectos influenciadores en la adherencia al examen citología vaginal es esencial para el alcance de la reducción, incidencia y mortalidad por este tipo de cáncer. **Descriptores:** Neoplasia del cuello uterino; Prevención; Enfermería.

^{1,3}Graduate student of Nursing, Faculdades Integradas de Patos/FIP/Patos (PB), Brazil. E-mail: renata.scarvalho@gmail.com; josseanadias@yahoo.com.br; ^{2,5,6}Nurses, Master in Health Science/UNICSUL (SP), Professors of Faculdades Integradas de Patos/FIP/Patos/(PB), Brazil. E-mails: rosamarthaventura@hotmail.com; ertarodrigues@fiponline.edu.br; priscillamenezes@fiponline.edu.br; ⁴Midwife Nurse, Doctor in Health Science, Preceptor of the Specialization Course in Obstetric Nursing/MS/Rede Cegonha. Natal (RN), Brazil, E-mail: rejanemb@uol.com.br

INTRODUCTION

Cervical Cancer (CC) is a worldwide problem of relevance being a disease with the great potential for prevention and cure when diagnosed early. It is the third most common form of cancer among women with approximately 530,000 new cases per year in the world and the fourth leading cause of death in Brazil.¹

Regarding the regional analysis, its highest incidence is in the North region with rates of 23.97 cases/100 thousand women. The Central-West and Northeast regions occupy the second position (20.72/100 thousand and 19.49/100 thousand), respectively. The Southeast is the third with 11.30/100 thousand and finally the South (15.17/100 thousand). The disease usually starts at 30 years old, and it is at increased risk until 50 to 60 years old.²

The CC is characterized by the exaggerated replication of the lining epithelium of the organ that compromises the underlying tissue (stroma), and it can affect nearby or distant other structures. Precursor lesions are asymptomatic and can be detected periodically on cytopathological examination and confirmed colposcopy and histopathology. However, the following clinical manifestations may be evident during the invasion stage: vaginal bleeding after sexual intercourse, abnormal vaginal discharge, pelvic pain accompanied by urinary or intestinal complaints in more advanced cases.³

This type of cancer has Human Papilloma Virus (HPV) as its main risk factor, but also there are several other factors that contribute to its development, such as diversity of sexual partners, early onset of sexual life, smoking, multiparity, nutritional deficiencies, immunity and prolonged use of oral contraceptives.⁴

Cytopathological examination or Pap smear is considered to be one of the main screening methods for CC and its precursor lesions, essential for women's health and relevant efficiency for their early detection, as well as reducing the incidence and mortality of this type of cancer.⁵

The time between examinations must be three years, after two negatives with an annual interval. Initiation of collection should be at 25 years old for women with active sex life extending up to 64 and may be suspended in cases of at least two successive negative tests in the last five years. For those over 64 and never practicing the Pap smear, two exams ranging from one to three years will be required, and, if both are negative, they may be exempted from additional exams.²

Although the importance of the cytopathological examination by strategies created by the government is very widespread, there are still difficulties regarding the adherence of women. Among the main reasons for not undergoing the examination, there is the lack of time that is often due to excessive workload. In this way, the Nursing workers are exposed to the working days that are determinant in the processes of illness, since it helps for the health service demand.⁶

Given the above, health workers responsible for providing care and guiding the population also need attention, but certain women neglect their health to meet the competitive demands by the institutions, failing to practice the CC preventive examination as recommended by the Ministry of Health (MS).⁷

Given this context, interest arose in investigating the attention that women workers give to their health and of relevant importance for the research, aiming to describe the preventive profile of cervical cancer in Nursing workers.

METHOD

This is a descriptive and exploratory study with a quantitative approach developed at Hospital e Maternidade Sinhá Carneiro in the city of Santa Luzia/PB with a population of 34 nursing professionals (22 technicians and 12 nurses) who met the following inclusion criteria: being in the age group over 18 years old; Being an employee of the institution and accept to participate in the research by signing the Free and Informed Consent Term (TCLE).

The data collection instrument was a structured form, using the interview technique with the professionals during September 2016, following all legal procedures, obeying the Norms of Resolution 466/12 of the National Health Council, after authorization from the Hospital e Maternidade Sinhá Carneiro, as well as receiving the approval of the Research Ethics Committee of the Faculdades Integradas de Patos Patos (CEP/FIP) with certificate of approval under Protocol Nº 1,704,110 and CAAE-56369416.5.0000.5181. The data were analyzed and discussed based on the literature.

RESULTS

Most of the interviewees are in the age group between 30 and 39 years old, single, technical/middle-level education, receiving between one and three minimum wages and

have up to three children. The sample consisted mostly of nursing techniques that work 30 hours a week and with only one employment relationship. They reported knowledge about CC with cytopathological examination about 1 year ago. All they declared the periodic practice of the Pap smear to be important, and most affirmed this behavior on an annual basis. More than half of the sample reported having no difficulties performing the Pap test, and when necessary, they routinely seek the public health service.

There was no difference between the sociodemographic data and the search for the public health service at the last Pap smear. It was also observed that professionals who do not use the public health service have higher education and fewer children.

The comparison between the reason for the health service's demand for cytopathological examination and sociodemographic data showed that those who use the service routinely have a larger age group and more frequent cytopathological examination. There was no association between the demand for the public health service in the last examination and sociodemographic data. However, for this sample, proportionally, more professionals without children and nurses did not seek the public health service in their last Pap Smear exam.

There was no association between the reason for the request to the health service for the practice of the exam and sociodemographic data. Proportionately, women with more than one employment relationship and who are knowledgeable about CC routinely seek the health service. This is a positive result, demonstrating the commitment of these professionals in the prevention of the disease.

DISCUSSION

It is possible to notice that most of the professionals of the sample are in an age group considered at greater risk for the development of CC. This result corroborates with a study showing its increased incidence in women between 30 and 39 years old. HPV infections and low-grade lesions predominate before 25 years old, which in most cases regress spontaneously.⁸

The study shows that the multiplicity of sexual partners is considered as one of the main risk factors for the onset of this disease making it unpredictable to be a single risk. For women with a single partner, it is a form of prevention of this type of cancer due to the reduced exposure to sexually transmitted diseases (STDs).⁹

The level of education of these women is satisfactory, and the same important aspect can directly influence the search for preventive exams, since access to information is capable of promoting health-friendly practices and care, corroborating with a study which states that women with a lower level of education may not understand the importance and purpose of the examination or do not have the necessary understanding that facilitates the search for health services, hindering to follow the CC screening.¹⁰ It is possible to infer that the study women, health workers who have a satisfactory level of knowledge are more accessible to the CCs preventive examination because they also have a favorable level of education.

Socioeconomic status has been mentioned as one of the main influential elements in preventive behavior, demonstrating that women belonging to segments with better economic conditions and education are more likely to undergo the preventive exam. In this sense, the literature argues that low socioeconomic conditions are related to higher CC incidence, and the low standard of hygiene and poor nutritional status is also linked to this fact.¹¹

Regarding the number of children, it was evidenced that there is a low risk of these women developing CC. Multiparity is a risk factor for this disease as well as early initiation of sexual life and early age of the first birth, increasing this incidence. Multiparous women with more than four children have the most cervical changes associated with hormonal, nutritional and immunological mechanisms during pregnancy, facilitating the transmission of HPV and, consequently, progression to the disease.¹²

The data from the study show that most of these professionals develop normal weekly workload, a fact that is positive since overwork is one of the main causes of damage to the health of workers. The insertion of women in the labor market together with the daily rush can contribute to non-adherence to preventive practices, since they experience divergences in schedules between the working day and the dossier offered by the health services, failing to undergo the cytopathology examination. With only one employment relationship the result is more favorable, given that the work overload can compromise women workers' access to the cytopathological examination due to the unavailability of the timetable for the search of the health service.¹³ It is also important that the team becomes aware of their roles of prevention of CC, determining spaces and

actions that provide adherence to the preventive examination to maintain the proximity of women to the health unit.¹⁴

The results about the knowledge of the CC show a positive point since once the woman learns what this disease represents, how it develops, what its risks are and how it can be prevented, it is possible that the adoption of a preventative routine happens consciously and spontaneously. The literature reports that the practice of educational actions in the routine of the health services has been neglected and little discussed. In this context, it is essential to clarify and understand the CC, its risk factors, such as HPV through Health Education, as it would not only increase the coverage of the Umbilical Cancer Prevention Program (CPCCU) but also provide security and overcoming doubts and yearnings about this matter.¹⁵

The data reveal quite significant results regarding the practice of the examination, considering that it can be related to the effectiveness of the campaigns of awareness and prevention of the CC by the health professionals. It is essential that these services guide the examination, how important it is for prevention and early diagnosis since its periodic effectiveness can reduce the mortality caused by the disease.¹

Regarding the time of compliance with the last cytopathological exam, this result may be related to the knowledge of its periodic importance given the cancer being highly invasive in the uterine cervix and presenting high lethality if identified late. However, according to the women with the highest vulnerability, they are the ones who least seek the preventive examination, and when they do, they usually have extensive intervals between one and the other, whose periodicity does not comply with the MS recommendations.¹⁶

Regarding the importance of periodic cytopathological practice, this fact may be related to the work of the Family Health Strategy (ESF) teams through which they have sought better ways to educate women in a clear and objective way about the CC, emphasizing whenever the only means of discovering and tracking this disease in time to treat or even cure it is the periodic practice of cytopathological examination as recommended by MS, which remains the best strategy and even the most adopted for its tracking and capable of reducing the incidence and mortality of this disease.³

As to the frequency of the cytopathological examination, it can be inferred that most women reach it as recommended by the MS,

that is, annually, and the others later, every two years and at an early age, every six months, which requires educational intervention. The proposed screening routine is the practice of the exam once a year and after obtaining two consecutive negative exams with an annual interval should be done every three years. This recommendation is based on the natural history of the CCU for its long period of evolution until the development of cancer, which allows early detection of pre-cancerous lesions and effective treatment.²

It can be noticed that, although the nursing workday could represent a probable barrier to access to prevention, they had a good adherence to the CC preventive examination. Knowing the main reasons that may make the Pap smear difficult, it is necessary to determine the profile of these women, to establish actions and strategies that are more compatible with each reality, aiming at favoring an early diagnosis and consequently reducing the mortality caused by the disease.¹⁷

The results demonstrate that a large proportion of these women were taking care of their health by seeking a cytopathological examination as a form of prevention, not only expecting gynecological complaints to be made available for their care, so the chances of an early detection and cure of the disease increase. The simple fact that women consider themselves healthy because they do not present gynecological complaints is one of the main reasons why they do not feel the need for preventive care.¹⁸

It is observed that, although most workers had attended the public health service for the examination, a significant portion did not opt for this service. In addition to the difficulties inherent in each woman for the cytopathological exam, there are factors related to health services that may discourage the preventive behavior of these women, for example, delay in attendance or in the marking of the exam, lack of materials, shortage of places due to the work overload of certain professionals, among others.¹³

Diverging from the results presented, a study pointed out that the greater the education of a woman, the greater the possibilities that they will seek the health service for the cytopathological examination, regardless of whether it is public or private. Regarding the woman having a child, the study emphasizes that this fact raises the possibility of the SUS examination. However, in other conditions, the woman with children

limits their practice in the private or public network.¹⁹

In agreement with this result, a study analyzed the coverage and appropriateness of the cytopathological examination in the South and Northeast regions of Brazil, showing that women over 25 and with a higher level of education presented greater adherence to the exam.²⁰ Another study reports that in the private service, health plans for access to CC preventive screening are influenced by socioeconomic and cultural factors. Thus, it becomes relevant to know the reasons that divert women from the Basic Health Units (UBS) to the cytopathological examination since this may induce them not to follow the periodicity recommended for the screening of the disease.²¹ This finding is similar to a research developed in Roraima in 2013, in which high adherence to the cytopathological examination was evidenced, and the periodic routine (79.5%) was the main reason reported for the practice of Pap smears.²²

CONCLUSION

It is well known that despite having a high potential for prevention and cure when diagnosed early, CC is still an important public health challenge in controlling its high incidence, mortality in Brazil and worldwide. As intended, through the study, the proposed objective could be reached, since the CC preventive profile of the Nursing workers of the analyzed municipality was identified, evidencing the favorable behavior of these women in the prevention of the disease. Thus, it was found that most of the interviewed women work in a 30-hour workweek with only one employment relationship, contributing in some way to adherence to the preventive examination, as well as being more accessible to the nursing professionals. Health promotion and prevention actions with a satisfactory level of education.

It was found that most of these women recognized the importance of periodic cytopathological examination and annually performed it as a form of prevention, although the insertion of women into the labor market meant a possible barrier to access to health services. Thus, understanding the influential aspects in adherence to the cytopathological examination, it is essential for achieving a reduction in incidence and mortality from this type of cancer. This understanding consequently allows for subsidies that favor the planning and organization of health services, as well as changes in care practices and the adequacy of policies to confront the CC.

REFERENCES

1. Brasil. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva. Controle do Câncer do colo do Útero: Conceito e magnitude [Internet]. 2015 [cited 2016 Dec 06 2015]. Brasília; Ministério da Saúde. Available from: http://www2.inca.gov.br/wps/wcm/connect/acoes_programas/site/home/nobrasil/programa_nacional_controle_cancer_colo_uterio
2. Brasil. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva. Estimativa 2014: Incidência de Câncer no Brasil [Internet]. 2014 [cited 2016 Dec 06];Brasília; Ministério da Saúde. Available from: http://www.inca.gov.br/rbc/n_60/v01/pdf/11-resenha-estimativa-2014-incidencia-de-cancer-no-brasil.pdf
3. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Controle dos cânceres do colo do útero e da mama [Internet]. 2013 [cited 2016 Dec 06];Brasília; Ministério da Saúde. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/control_canceres_colo_uterio_2013.pdf
4. Nunes A. C. Uma análise da trajetória de mulheres com câncer de colo uterino na saúde pública do Município do Rio de Janeiro. Universidade Federal do Rio de Janeiro. Centro de Ciências da Saúde. Hospital Universitário Clementino Fraga Filho. Residência Integrada Multiprofissional em Saúde [Internet]. 2012 [cited 2016 Dec 07]. Available from: [http://www.downloads/uma%20anlise%20da%20trajetria%20de%20mulheres%20com%20cncer%20de%20colo%20uterino%20\(1\).pdf](http://www.downloads/uma%20anlise%20da%20trajetria%20de%20mulheres%20com%20cncer%20de%20colo%20uterino%20(1).pdf)
5. Brasil. Ministério da Saúde. Secretaria de Gestão do Trabalho e da Educação na Saúde. Departamento de Gestão da Educação na Saúde. Citopatologia Ginecológica [Internet]. 2012 [cited 2016 Dec 06];Brasília; Ministério da Saúde. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/tecnico_citopatologia_caderno_referencia_1.pdf
6. Felli VEA. Condições de trabalho de enfermagem e adoecimento: motivos para a redução da jornada de trabalho para 30 horas. Enfermagem em Foco [Internet]. 2012 [cited 2016 Dec 06];3(4):178-81. Available from: <http://revista.portalcofen.gov.br/index.php/enfermagem/article/view/379>
7. Silva JMTS, Bueno AP, Amin VHG, Sudam LCP. Autoexame das mamas e oncociologia em trabalhadoras de saúde de Londrina/Paraná. Cienc Cuid Saúde [Internet].

- 2012 [cited 2016 Dec 07];11(3):506-13. Available from: <http://www.periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/13416>
8. Brasil. Ministério da Saúde. Instituto Nacional de Câncer José Alencar Gomes da Silva. Controle do Câncer do colo do Útero: Detecção precoce [Internet]. 2011 [cited 2016 Dec 06]; Brasília; Ministério da Saúde. Available from: http://www2.inca.gov.br/wps/wcm/connect/tiposdecancer/site/home/colo_uterio/detecca_o_precoce
9. Nascimento LC, Nery IS, Silva AO. Conhecimento cotidiano de mulheres sobre a prevenção do câncer de colo do útero. Rev.enferm. UERJ [Internet]. 2012 [cited 2016 Dec 06]; 20(4):476-80. Available from: <http://www.facenf.uerj.br/v20n4/v20n4a11.pdf>
10. Oliveira PSD, Lopes DA, Pinho L, Silva Junior RFF, Oliveira HED, Barbosa HA. Adesão das mulheres ao exame preventivo de câncer de colo de útero: um ensaio comunitário. J Nurs UFPE on line [Internet]. 2016 [cited 2016 Dec 07];10(2):442-8. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/8517/pdf_9534
11. Zanotelli T. A percepção de mulheres sobre o exame citopatológico [Internet]. 2013 [cited 2016 Dec 07]; 2013. Curso de Enfermagem, Centro Universitário Univates, Lajeado. Available from: <https://www.univates.br/bdu/bitstream/10737/389/1/TaliseZanotelli.pdf>
12. Barasuol MEC, Schmidt DB. Neoplasia do colo do útero e seus fatores de risco: uma revisão integrativa. Revista Saúde e Desenvolvimento [Internet]. 2014 [cited 2016 Dec 06]; 6(3):139-53. Available from: <http://www.grupouninter.com.br/revistaasaude/index.php/saudeDesenvolvimento/article/view/312/228>
13. Aguilar RP, Soares DA. Barreiras à realização do exame Papanicolaou: perspectivas de usuárias e profissionais da Estratégia de Saúde da Família da cidade de Vitória da Conquista/BA. Physis: Revista de Saúde Coletiva [Internet]. 2015 [cited 2016 Dec 06]; 25(2): 359-79. Available from: http://www.scielo.br/scielo.php?pid=S0103-73312015000200359&script=sci_abstract&tlng=pt
14. Perez IMP. Baixa adesão ao exame citopatológico na Estratégia Saúde da Família Carapina II em Governador Valadares/Minas Gerais.Universidade Federal de Minas Gerais. Curso de Especialização em Atenção Básica em Saúde da Família [Internet]. 2015 [cited 2016 Dec 08]; Available from: <https://www.nescon.medicina.ufmg.br/biblioteca/imagem/baixa-adesao-exame-citopatologico-esf.pdf>
15. Pinheiro DN, Pinheiro MCN, Xavier MB, Amaro CSO, Parente NA. Aspectos educativos do programa de prevenção do câncer do colo do útero, Belém, Pará, Brasil. Revista Eletrônica Gestão & Saúde [Internet]. 2013 [cited 2016 Dec 07];4(4):1469-82. Available from: <http://www.downloads/Dialnet-AspectosEducativosDoProgramaDePrevencaoDoCancerDoC-5557502.pdf>
16. Peloso TK. Plano de ação para ampliar a cobertura do exame citopatológico na Estratégia Saúde da Família Carapina II.Universidade Federal de Minas Gerais. Curso de Especialização em Atenção Básica em Saúde da Família [Internet]. 2014 [cited 2016 Dec 07]; Available from: <https://www.nescon.medicina.ufmg.br/biblioteca/imagem/4393.pdf>
17. Santos UM, Souza SEB. Papanicolaou: Diagnóstico precoce ou prevenção do câncer cervical uterino? Revista Baiana de Saúde Pública [Internet]. 2013 [cited 2016 Dec 07];37(4):941-51. Available from: <http://rbsp.sesab.ba.gov.br/index.php/rbsp/article/view/420/0>
18. Nascimento RG, Araújo A. Falta de periodicidade na realização do exame citopatológico do colo uterino: motivações das mulheres. Reme: Revista Mineira de Enfermagem [Internet]. 2014 [cited 2016 Dec 07];18(3):557-64. Available from: <http://www.reme.org.br/artigo/detalhes/946>
19. Santiago FS. Acesso aos exames periódicos de saúde entre as mulheres brasileiras acima de 24 anos. Revista Brasileira de Estudos Regionais e Urbanos [Internet]. 2012 [cited 2016 Dec 07];6(2):48-65. Available from: <https://www.revistaaber.org.br/rberu/article/view/92>
20. Correa MS, Silva SD, Vinholes SF, Augusto FL, Xavier PR, Thumé E, et al. Cobertura e adequação do exame citopatológico de colo uterino em estados das regiões Sul e Nordeste do Brasil. Cad. Saúde Pública [Internet]. 2012 [cited 2016 Dec 06]; 28(12):2257-66. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2012001400005
21. Moraes JR, Guimarães PV, Paula PL, Ferreira MLP, Guimarães RM, Luiz RR. Relação entre plano de saúde e a realização do exame Papanicolaou: uma aplicação de escore de propensão usando um inquérito amostral complexo. Rev Bras Epidemiol [Internet]

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2011 [cited 2016 Dec 06];14(4):589-97.
Available from:
http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1415-790X2011000400006

22. Navarro C, Fonseca AJ, Sibajev A, Souza CIA, Araújo DS, Teles DAF et al. Cobertura do rastreamento do câncer de colo de útero em região de alta incidência. Rev Saúde Pública [Internet]. 2015 [cited 2016 Dec 07];49(17):1-8.
Available from:
http://www.scielosp.org/pdf/rsp/v49/pt_0034-8910-rsp-S0034-89102015049005554.pdf

Submission: 2016/09/05

Accepted: 2017/04/06

Publishing: 2017/06/01

Corresponding Address

Rejane Marie Barbosa Davim
Av. Amintas Barros, 3735
Bloco A, Ap. 601
Bairro Lagoa Nova
CEP: 59056-215 – Natal (RN), Brazil