

The Role of Nursing in identifying the early Diagnosis of Cervical Cancer in Primary Care: Integrative Literature Review

Daniele dos Santos Garcia¹, Viviane Ferraz Ferreira de Aguiar¹, Ewellyn Natália Assunção Ferreira³, Fernanda Araújo Trindade², Lucrecia Aline Cabral Formigosa¹, Amanda Carolina Rozario Pantoja³, Andrea da Silva Pereira Amaral³, Gyselle Moraes da Silva⁴, Susi dos Santos Barreto de Souza¹, Nillana da Conceição de Castro Rodrigues², Gabriela Nunes Pinheiro³, Dandara de Fátima Ribeiro Bendelaque⁵, Rafael Everton Assunção Ribeiro da Costa⁶, Raylana Tamires Carvalho Contente⁷, Dayara de Nazaré Rosa de Carvalho²

¹Federal University of Pará (UFPA), Belém, Pará, Brazil

²State University of Pará (UEPA). Belém-Pará, Brazil.

³University of the Amazon (UNAMA). Belém, Pará, Brazil.

⁴Amazon Higher School (ESAMAZ). Belém, Pará, Brazil.

⁵Paraense Teaching College (FAPEN). Belém, Pará, Brazil

⁶State University of Piauí. Teresina, Piauí - Brazil.

⁷Integrated Faculty of the Amazon (FINAMA). Belém, Pará, Brazil.

Corresponding Author: Dayara de Nazaré Rosa de Carvalho

Abstract— Objective: to identify scientific evidence in databases on the identification of the early diagnosis of cervical cancer carried out by nurses, between the years 2012 and 2018. Method: Consists of a descriptive study, with a qualitative approach developed through the Integrative Review of Literature (RIL). Method: for data analysis, the IramuteQ software was used, which prepared the Dendrogram with the most used words and divided into classes described below: 1) The role of nurses in the promotion and prevention of cervical cancer; 2) The actions developed in the Primary Care services for early identification of cervical cancer; 3) Factors that make it difficult for women to perform the PCCU exam. Results / discussion: after analysis, it was concluded that most women are unaware of the problems related to cervical cancer and Pap smear. Conclusion: This fact may be related to the lack of information, fear and shame when performing the exam.

Keywords— HPV. Neoplasia. Cervical cancer. Prevention. Nursing.

I. INTRODUCTION

Infection with human papillomavirus (HPV), in general, affects young people at the beginning of sexual activity and most of these infections are asymptomatic and transient. Few cases progress to invasive carcinoma of cervical cancer, with the virus and its persistence as important factors for differential biological behavior.

However, there are additional risk factors for the development of cancer lesions, such as: multiparity,

smoking, concomitant presence of other sexually transmitted infections, mainly *Chlamydia trachomatis*, herpes and human immunodeficiency virus (HIV) [1].

For Bortolon et al. [2], due to the high incidence and mortality in the Brazilian female population, CC is a public health problem, it can be avoided when precursor lesions, which are not cancer, are diagnosed and treated early. According to the National Cancer Institute José Alencar Gomes da Silva [INCA] (2015) [3], in Brazil, control of

cervical cancer is a priority, using the Pap smear as a screening strategy, with the objective of guaranteeing its access by women aged 25 to 64 years, assessed as being at higher risk, and qualify or diagnose and treat cancer precursor lesions.

For Correa and Russomano (2012) [4] the primary prevention of CC is associated with a reduced risk of infection by the virus, as transmission occurs mainly through sex, the use of condoms during sexual intercourse with penetration protects, however in a way partial. The vaccine has more evidence of protection and is indicated in cases where there was no contact with viruses.

According to Rodrigues and Sousa (2015) [5] the transmission can be done by any individual who has injuries caused by HPV, and can be in direct contact with the infected skin with micro cuts or by micro trauma common in any sexual relationship, which is the main form of transmission of the virus, including anal and oral sex.

In view of the above, nurses play an extremely important role in care, education and research activities. Because this professional plays an important role in health and disease, because it works at different levels of prevention Preventive actions should not be isolated, but form a continuous link with the female and male population. Although the cytological examination requires intimate exposure, it is an embarrassing procedure, nurses have a fundamental role to be able to break the prejudice of a simple, painless examination, but full of benefits to promote women's health (Moura, Nunes, Rodrigues & Nobrega, 2016) [6].

Given the importance of the theme, this study aimed to identify the scientific evidence in the databases on the identification of the early diagnosis of cervical cancer performed by nurses in primary care, from 2012 to 2018.

II. METHOD

This study consists of a descriptive study with a qualitative approach of the type Integrative Literature Review (RIL). To perform the RIL, the following steps must be followed: 1) Establishment of a hypothesis or

research question; 2) Sampling or searching the literature; 3) Categorization of studies; 4) Evaluation of the studies included in the review; 5) Interpretation of results; 6) Synthesis of knowledge or presentation of the review.

Initially, the research topic was delimited on the role of the nurse in identifying the early diagnosis of cervical cancer. Based on the problem and the object of study, the following research question is raised: what are the actions taken by nurses for the early diagnosis of cervical cancer and what are the main difficulties faced by women in Basic Health Units to perform the Pap test?

This study was carried out through a careful electronic search in a database specialized in health and nursing. The following databases were used: Database in Nursing (BDENF), Electronic Scientific Online Library (SCIELO), Latin American and Caribbean Literature in Health Sciences (LILACS). The controlled descriptors used in this study, obtained from Decs (Health Sciences Descriptors), involved "HPV", "neoplasm", "cervix", "prevention", "nursing" and "diagnosis". As uncontrolled descriptors (keywords), the following were used: "human HPV" and "prevention and diagnosis".

The following inclusion criteria were used: articles published in Portuguese, English and Spanish; surveys available in full and online; articles published from 2012 to 2018 available electronically and in full for consultation. The following were excluded from this study: editorials, letters to the editor, reflective studies and studies that do not address the relevant topic for the purpose of the study.

At the end of data collection, 3,663 records were found in the databases. The articles were selected according to the title of the article, authors, year and database, type of study and publication, objective and sample of results. At the end of this stage, the final sample, consisting of 12 publications, in which they met the established criteria, as shown in Table 1, below.

Chart 1 - Identification of selected articles.

ARTICLE TITLE	AUTHORS / YEAR / DATABASE	STUDY TYPE / PUBLICATION OF COUNTRY	OBJECTIVE	SUMMARY OF RESULTS
Knowledge and practice of women attending the Family Health Unit on the Pap smear.	Thatiany Rodrigues Santiago, Magna Santos Andrade, Patricia Gilvânia Passion birth. 2014. BDEF	Study cohort cross. Brazil	Describe the knowledge and practice of Pap of women between 25 and 59 years served by the Strategy of the Family Health.	The study showed that most of the women had adequate practice regarding the Papanicolaou. However, the prevailing ignorance about the purpose of the collection for the Pap smear.
Epidemiological profile of women with HPV attended at a basic health unit.	Thulium Felipe Vieira de Melo, Hélyda Bezerra de Souza, Dany Geraldo Kramer Cavalcanti Silva, Richardson Augusto Rosendo da Silva. 2016. BDEF	Study document. Brazil.	To describe the epidemiological profile of women with HPV treated at a Basic Health Unit.	The epidemiological profile was characterized by women aged 19-30 years, married, white, with incomplete secondary education, income up to one minimum wage, first intercourse between 15-17 years and a partner.
Access to health services for the control of cervical cancer in primary care.	Magna Maria Pereira da Silva, Maria Teresa Cicero Lagana, Clelia Albino Simpson, Ana Michele Farias Cabral. 2013 BDEF	Cross-sectional study. Brazil	Analyze the control of cervical cancer from the access to the health service approach.	Late diagnosis is related to the difficulty of access of women to health services.
Nurse training for the prevention of cervical cancer.	Magda Rogéria Pereira Viana, Maria Eliete Batista Moura, Benevina Maria Vilar Teixeira Nunes, Claudete Ferreira de Sousa Monteiro, Eliana Campelo Lake. 2013. LILACS.	Cross-sectional study. Brazil	Analyze nursing education for the prevention of cervical cancer in the context of family health strategy.	It was observed that the nurse's performance is important to the implementation and development of lifelong learning policy to meaningful learning and the possibility of transforming professional practices and hence the care reality.
Coverage and adequacy of the Pap test for cervical states in the South and Northeast of Brazil.	Michele Correa da Silva, Denise Silva da Silveira, Fernando Siqueira Vinholes, Luiz Augusto Facchini Roberto Piccini Xavier, Elaine Thume, Elaine	Cross-sectional study. Brazil	Analyze the coverage and adequacy of the frequency of cervical screening cervical in women who gave birth in the last two years before the study, residents in areas	The study found to be necessary to expand and strengthen preventive measures offered by the health services, especially for subgroups of more vulnerable women and enhance the situations that

	Tomasi. 2017. LILACS.		covered by Basic Health Units (BHU) in the South and Northeast Brazil.	require use of health services.
Prevalence of preventive screening of cervical cancer in Rio Branco, Acre, Brazil, and factors associated with non-examination.	Maria Fernanda de Sousa Oliveira Borges, Leila Maria Geromel Dotto, Rosalina Jorge Koifman, Aquino Margaret Cunha Pascoal Torres Muniz. 2014. LILACS.	Cross-sectional study. Brazil	To estimate the coverage of preventive screening for cervical cancer in the city of Rio Branco, capital of Acre, Brazil, in the previous three years to research and evaluate factors associated with non-examination.	It was statistically evident the absence of the examination in women 18-24 years and 60-69 years old, single, with low income and low education levels, indicating greater need for intervention in the group of women more vulnerable to the incidence and mortality from cervical cancer uterus.
everyday knowledge of women about prevention of cervical uterine cancer.	Leidinar Cardoso Nascimento, Inez Sampaio Nery, Antonia Oliveira Silva. 2012. LILACS.	Qualitative study of social representations. Brazil	Apprehend the social representations made by 64 women in the city of Teresina during the months of October and November 2009, on the prevention of cervical cancer of the uterus, as well as analyze how these representations influence the conduct of the examination prevention.	Social representations constitute as forms of contribution to the prevention of cervical cancer and enable early diagnosis. For women, submission to the Pap test and the result of the expectation arouse feelings that may negatively influence the practices related to the prevention of cervical cancer.
Knowledge of women about HPV and cervical cancer after nursing consultation.	Aline Ferreira De Souza, Lucia Helena Rodrigues Coast. 2015. LILACS.	Cross-sectional study. Brazil.	Understanding the assimilative capacity of women undergoing pap smears about human papillomavirus and its relationship with cervical cancer, through the information and / or guidance during the past consultation by nurses.	The study shows ignorance of users about HPV infection and its direct relationship with cervical cancer the same womb after nursing consultation
Inadequate practice of women about Pap.	Elainy Fabrícia Galdino Dantas Malta, Fabiane do Amaral Gubert, Camila Moreira Teixeira Vasconcelos, Emilia Soares Chaves, João Marcos Ferreira de Lima Silva, Eveline Pinheiro Bezerra.	Cross-sectional study. Brazil	Identify the factors related to inadequate practice of the Pap test in women inside the Brazilian Nosdeste	Has been identified as factors related to inadequate exam practice: inadequate knowledge, unmarried women up to 29 years are more likely to present inadequate practice compared those with upper and married age and the lack of material is still touted as

	2017. SCIELO.			difficulty.
Barriers to the exam / Pap prospects users and professionals of the Strategy Health City Of Family In Vitoria Da Conquista - BA	Rebeca Aguilar Pinheiro, Daniela Soares Arruda. 2015. SCIELO.	Cross-sectional study. Brazil	Knowing the barriers that lead women of childbearing age in the city of Vitória da Conquista - BA not to perform pap smears, from the perspective of the women themselves and health professionals.	Insufficient knowledge of women about Pap smear, negative feelings before the exam, lack of attitude, issues related to health services and the inclusion of women in the labor market constituted barriers to the realization of Pap smears.
Knowledge and practice of women about cervical cancer.	Maria Fernanda Leite, Fabiana Cristina Frigieri of Vitta, Leticia Carnaz, Marta Helena Souza de Conti, Sara Nader Marta, Marcia Aparecida Nuevo Gatti, Sandra Fiorelli de Almeida Penteadó Simeon Alberto Vitta. 2014. SCIELO.	Cross-sectional study. Brazil	Assess the level of information about the examination of cervical uterine cancer and its association with sociodemographic variables among women in a health facility in the city of Bauru, São Paulo, Brazil.	Women have insufficient information on proper Pap smear practice, knowledge about the exam, the risk factors and ways to prevent the disease.
The role of the Health Strategy nurse of the family in the prevention of cervical cancer.	Andressa Lima Ramos, Danila Pacheco da Silva, Gracyanne Maria Oliveira Machado, Eliany Nazareth Oliveira, Danyela dos Santos Lima. 2014. SCIELO.	Cross-sectional study. Brazil	Check the performance of nursing in the Health Strategy Parnaíba municipality of Family-ESF for prevention of Cervical Cancer.	It was evident the need of additional actions and activities with women, since these actions take place, but rather systematically and without a proper routine.

Source: research authors, 2019.

After the selection and synthesis of the articles, they were analyzed using the *IraMuTeQ software* (Interface Analysis for multidimensional analysis of texts and questionnaires), developed in France by Pierre Ratinaud (2009). The program is anchored in the R software and allows different forms of statistics on textual corpus and average word tables (Moura et al., 2014) [7].

From this, a textual corpus was created with the data found in the results of the selected studies and reproduced

in a single text file, readings, corrections and coding of fixed variables were performed. *IraMuTeQ* does a vocabulary search and reduces words, based on their roots (stemming), the dictionary was created from reduced forms and identified as active and supplementary forms (Moura et al., 2014) [7].

For this study, the Descending Hierarchical Classification (CHD) method, adopted by Reinert (1990), was used, in which the texts are classified according to

their vocabularies and the set of them is divided by the frequency of the forms used. From matrices that cross texts and words (repeated tests X^2), the CHD method is applied to obtain a stable and definitive classification (Camargo & Justo, 2013).

III. RESULTS AND DISCUSSION

IraMuTeQ prepared the Dendrogram through the CHD where the words that obtained frequency equal to or greater than the average frequency were registered and each class was represented by the most significant words and their respective associations with the class.

After analyzing the identification of textual domains

and interpreting meanings, we sought to name their respective meanings in classes described below: 1) The role of nurses in the promotion and prevention of cervical cancer; 2) Actions performed in the Primary Care services for early identification of cervical cancer; 3) Factors that hinder women in carrying out the PCCU. Figure 1 shows Hierarchical Descending Classification (CHD) - Dendogram.

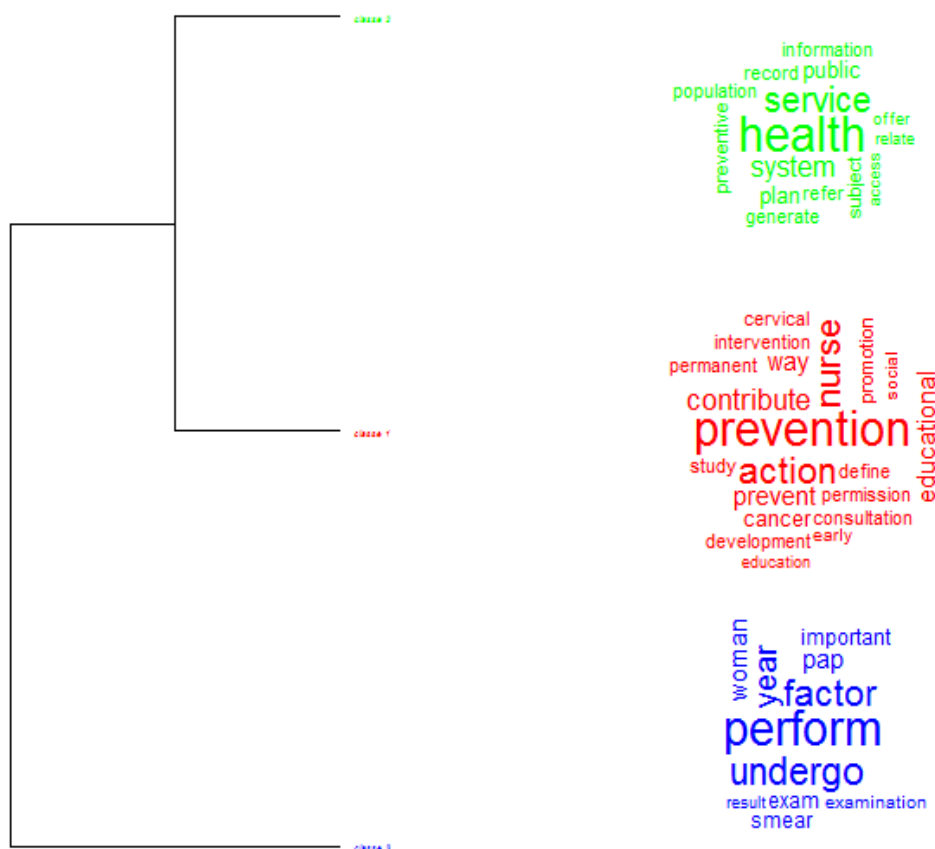


Fig.1: Dendrogram.

Source: research authors, 2019.

Class 1 - The Role of the Nurse in the Promotion and Prevention of Cervical Cancer

According to Nascimento, Nary & Silva (2012) [9], it is necessary that the health professional, especially the nurse, must act together with the guidelines for adherence and follow-up to the preventive exam, as well as the dissemination of the ways of preventing this cancer, since behavioral actions can minimize the risks to which patients

are exposed. However, Souza and Costa (2015) [10], affirms that the nursing consultation in the preventive exam generally focuses only on exams and routine information not focusing on listening, on communication, much less on the needs of women.

In addition, Melo, Bezerra, Silva and Silva (2016) [11], explain who more than offering the exam alone, it is necessary to recognize that women, especially those in

adolescence, need clarification about the importance of the exam for the early detection of CC, as well as information on the etiology of the disease, focused on the risks of exposure to STDs, including HPV. It is essential to involve the protagonists in the educational process that promotes a better quality of life.

According to Silva, Lagana, Simpson and Cabral (2013) [12], for planning activities and strategies, they must be considered and respected as regional peculiarities, involvement of community leaders, health professionals, women's movements and the media.

For Ramos et al. (2014) [13], the diagnosis of CHD

The early work performed by nurses is due to their participation in control activities, through the clarification of doubts, prevention of risk factors, gynecological consultations to the preventive exam, influencing to better meet the demand, implementation of a quality registration system and intervention for proper referral.

However, for Aguilar and Soares (2015) [14], the nurse must act beyond the environment of the health unit, must go in search of users of health services, making visits to homes in a comprehensive and humanized way, guiding each procedure collection, thus helping to provide good care to women in the Basic Health Unit.

Class 2 - Actions performed in the Primary Care services for early identification of cervical cancer

According to Corrêa et al. (2012) [15], the most adopted strategy for screening cervical cancer is the periodic cytopathological examination. The high coverage of the target population is the most important component used in basic health units to combat mortality from cancer in the womb. For this, according to Ramos et al. (2014) [13], this strategy should be complemented with information related to the exam during routine consultations and educational actions, such as those given in lectures, conversation circles and individual guidance, with awareness of the importance of performing the Pap smear at the beginning of this woman's sexual life, in addition to encouraging users to attend the health unit constantly. However, these actions are carried out only sporadically.

For Alves, Alves & Assis (2016) [22], other active learning strategies should be used in health units as educational practices. As an example, the participation of professionals in some religious events; increase in the offer of hours for the exam; conduct joint efforts to conduct the examination; approach of the multidisciplinary team on the topic with women and the community during home visits and also in the waiting room; and carrying out popular

health education activities in schools and community events, based on dialogue and exchange of experiences.

However, Ramos et al. (2014) [13], emphasizes the need for greater dissemination of these activities provided by health units and different approaches, considering socioeconomic and cultural aspects, favoring the attractions for those who should be encouraged or the interest of women in participating in activities offered, and consequently multipliers of information acquired during this process.

Class 3 - Factors that hinder women in carrying out the PCCU

According to Souza and Costa (2015) [10], many women are unaware of the HPV virus and its relationship with cervical cancer, as well as ways of transmission and prevention strategies. In contrast to this finding, the study by Silva et al. [17], states that the level of knowledge about the disease was considered satisfactory among the women studied, as it presents much of the knowledge about the use of the test. However, knowing the importance of the exam is not a decisive factor for the exam.

For Santiago et al. (2014) [16], one of the factors that hinder the marital situation, which was found that single women and with a multiplicity of sexual partners are more likely to perform the exam inadequately. In addition, there is a multiparity in which the high number of children presents itself as a difficulty to perform the Pap smear, as it influences self-care in relation to women's health, contributing to the late detection of CC. On the other hand, Silva et al. (2018) [17] assumes that married women

they have a more active sex life when compared to single and widowed women, emphasizing the importance of periodic Pap smear tests in this population.

According to Malta et al. (2017) [18], in relation to the socioeconomic factor and schooling, it was identified that women with low education and unfavorable socioeconomic condition have less knowledge about the purpose of the exam, therefore, they do not seek health services to perform it, influencing not preventive exam. Other authors point out that this factor results in difficulties related to prevention and promotion measures for women's health, since the lower the level of education, the greater the difficulty in understanding health maintenance, focused on preventive and health measures. control (Carvalho, Falavigna, Silva & Frazilli, 2015) [21].

According to Aguilar and Soares (2015) [14], the insertion of women in the labor market, as an intervening factor for the non-performance of the Pap smear, due to the overlap of work activities associated with caring for the

family that burdens the woman, or that hinders adherence to preventive practices. Likewise, in a study by Ramos et al. (2014) in the city of Parnaíba-PI, it was observed that the times and days for the collection of material for examination are carried out on equal days in the basic health units, which is an obstacle for women who work during the operation period of the unit.

Aguilar and Soares (2015) [14], explain the intrinsic difficulties of women in performing the Pap smear, such as the feelings prior to the exam, for example: shame and fear due to the need to expose mainly the genitals to male professionals, in addition to the lack of information on female anatomophysiology, restrictive experiences in the area of sexuality, experience of violence, lack of access and lack of communication about the exam. These factors are reaffirmed by Nascimento et al. (2012) [9], who show that Pap smears arouse negative feelings, related to sexuality that reflect on actions and the way of living, which can interfere with the woman's adherence to the exam. Thus, the result is the same that causes expectation and fear due to the possibility of being positive for cancer.

According to Leite et al. (2014) [19], there are still obstacles related to the structuring of health services. The most evident difficulties were the problems related to accessibility and the offer of vacancies and the unmet health needs of women. There are also problems related to the work overload of professionals, which reduce the offer of places to serve the population. Other reasons are geographical barriers, such as the location of the health service that may be distant from users, transportation difficulties, in addition to organizational barriers, such as bureaucracy, delayed service and time spent to make an appointment.

This finding is similar to the results of other studies, which show that only half of the basic health units in Brazil have an adequate structure for the screening of cervical cancer and only 30% of the health teams were classified with an adequate work process. (Tomasi et al., 2015) [20].

IV. CONCLUSION

In this study, the most used databases were LILACS and SCIELO. The years of most publication of the articles are between 2012 and 2015. Most of the articles aim to describe the nurse's actions in the prevention and diagnosis of cervical cancer, the barriers that interfere in the Pap smear by women and the epidemiological profile the same.

In this study it was noticeable that most women are unaware of the problems related to cervical cancer. The lack of knowledge may be related to the lack of

communication between the health professional and the assisted women. Educational practices should seek the participation of health professionals and women in the discussion on the topic and clarify how to prevent and control actions.

Some factors prevent women from having a Pap test, such as: lack of knowledge of the importance of preventive tests, fear of being positive for cervical cancer and shame. It was also observed that some women only perform the gynecological exam when there are signs and symptoms of pathology.

Therefore, the nurse must always remain up-to-date and active to raise awareness and provide health education for the female population on the prevention of CC. This professional has a crucial role for the prevention and early diagnosis of this cancer and for the Pap smear, in order to reduce the prevalence of this neoplasm.

REFERENCES

- [1] Souza, G. C. S., Silva, E.R., Macêdo, F. L.S., Soares, L. R. C., Rosal, V. M. S., & Rocha, M. G. L. (2015). Human papillomavirus: viral biology and carcinogenesis. *Femina*, 43 (4), 189-192. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/en/lil-771212>.
- [2] Bortolon, P. C., Silva, M. A. F., Corrêa, F. M., Dias, M. B. K., Knupp, V. M. A. O., Assis, M., & Claro, I. B. (2012). Quality Assessment of Cervical Cytopathology Laboratories in Brazil. *Revista Brasileira de Cancerologia*, 58 (3), 435-444. Retrieved from http://www1.inca.gov.br/rbc/n_58/v03/pdf/13_artigo_avaliacao_qualidade_laboratorios_citopatologia_colo_uterio_brasil.pdf
- [3] José Alencar Gomes Da Silva National Cancer Institute. (2015). Coordination of Prevention and Surveillance. Estimate 2016: incidence of cancer in Brazil. Rio de Janeiro: Author. Retrieved from <https://www.inca.gov.br/campanha/dia-nacional-de-combate-ao-cancer/2015/estimativa-2016-incidencia-de-cancer-no-brasil>
- [4] Corrêa, F. M., & Russomano, F. B. (2012). New cervical cancer prevention technologies: who really benefits ?. *Revista Brasileira de Cancerologia*, 58 (3), 525-527. Retrieved from http://www1.inca.gov.br/rbc/n_58/v03/pdf/23_artigo_novas_tecnologicas_prevencao_cancer_colo_uterio_quem_fato_beneficia.pdf
- [5] Rodrigues, A. F., & Sousa, J. A. (2015). Human papillomavirus: prevention and diagnosis. *Journal of Epidemiology and Infection Control*, 5 (4), 197-202. Retrieved from <https://online.unisc.br/seer/index.php/epidemiologia/article/view/6043/4633>. doi: <http://dx.doi.org/10.17058/reci.v5i4.6043>

- [6] Moura, I. J., Nunes, E. M., Rodrigues, S. C., & Nobrega, J. O. C. (2016). The role of nurses in the prevention of cervical cancer. *Themes in Health*, 16 (2), 482-497. Retrieved from <http://temasemsaude.com/wp-content/uploads/2016/08/16227.pdf>
- [7] Moura, L. K. B., Marcaccini, A. M., Mattos, F. T. C., Sousa, A. F. L., Nascimento, G. C., & Moura, M. E. B. (2014). Integrative review of oral cancer. *J. res. : fundam. care. Online*, 6 (suppl.), 164-175. Retrieved from http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/4516/pdf_1511.doi:<http://dx.doi.org/10.9789/2175-5361.rpcfo.v6.4516>
- [8] Camargo, B. V., & Justo, A. M. (2013). Tutorial for using textual analysis software IRAMUTEQ. 1 th ed. Florianopolis-SC: Federal University of Santa Catarina.
- [9] Nascimento, L. C., Nery, I. S., & Silva, A. O. (2012). Daily knowledge of women about the prevention of cervical cancer. *Rev. Enfer. UERJ*, 20 (4), 476-80. Retrieved from <https://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/4813>
- [10] Souza, A. F., & Costa, L. H. R. (2015). Women's knowledge about hpv and cervical cancer after nursing consultation. *Revista Brasileira de Cancerologia*, 61 (4), 343-350. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/en/biblio-847047>
- [11] Melo, T. F. V., Bezerra, H. S., Silva, D. G. K. C., & Silva, R. A. R. (2016). Epidemiological profile of women with hpv treated at a basic health unit. *Rev Fund Care Online*, 8 (4), 5177-5183. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/pt/bde-29734>. doi: <http://dx.doi.org/10.9789/2175-5361.2016.v8i4.5177-5183>
- [12] Silva, M. M. P., Lagana, M. T. C., Simpson, C. A., & Cabral, A. M. F. (2013). Access to health services for the control of cervical cancer in primary care. *Journal of Research Fundamental Care Online*, 5 (3), 273-282. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/en/bde-25131>. doi: <http://dx.doi.org/10.9789/2175-5361.2013.v5n3p273>
- [13] Ramos, A. L., Silva, D. P., Machado, G. M. O., Oliveira, E. N., & Lima, D. S. (2014). The role of nurses in the family health strategy in the prevention of cervical cancer. *SANARE*, 13 (1), 84-91. Retrieved from <https://sanare.emnuvens.com.br/sanare/article/view/437/292>
- [14] Aguilár, R. P., & Soares, D. A. (2015). Barriers to the Papanicolau exam: perspectives of users and professionals of the Family Health Strategy in the city of Vitória da Conquista-BA. *Physis Revista de Saúde Coletiva*, 25 (2), 359-379. Retrieved from http://www.scielo.br/scielo.php?pid=S0103-73312015000200359&script=sci_abstract&tlng=pt. doi: <http://dx.doi.org/10.1590/S0103-73312015000200003>
- [15] Corrêa, M. S., Silveira, D. S., Siqueira, F. V., Facchini, L. A., Piccini, R. X., Thumé, E., & Tomasi, E. (2012). Coverage and adequacy of cervical cytopathological examination in states in the South and Northeast regions of Brazil. *Cad. Saúde Pública*, 28 (12), 2257-2266. Retrieved from http://www.scielo.br/scielo.php?pid=S0102-311X2012001400005&script=sci_abstract&tlng=pt
- [16] Santiago, T. R., Andrade, M. S., & Paixão, G. P. N. (2014). Knowledge and practice of Papanicolaou women attended at the family health unit. *Rev Enferm UERJ*, 22 (6), 822-9. Retrieved from <https://pesquisa.bvsalud.org/portal/resource/pt/bde-27923>. doi: <http://dx.doi.org/10.12957/reuerj.2014.6368>
- [17] Silva, J.P., Kamila, N. S. L., Souza, T. A., Sousa, K. M. O., Rodrigues, S. C., Alves, J. P., Rodrigues, A.R.S., Souza, A.R.D. (2018). Pap test: factors that influence the failure to perform the test in women aged 40 to 65 years. *Arq. Ciênc. Saúde*, 25 (2), 15-19. Retrieved from <http://www.cienciasdaude.famerp.br/index.php/racs/article/view/933/757>
- [18] Malta, E.F. G. D., Gubert, F. A., Vasconcelos, C. T. M., Chaves, E. S., Silva, J. M. F. L. and Beserra, E. P. (2017). Inappropriate practice of women on pap smears. *Text Contexto Enferm*, 26 (1), e5050015. Retrieved from http://www.scielo.br/scielo.php?pid=S0104-07072017000100311&script=sci_arttext&tlng=pt. doi: <http://dx.doi.org/10.1590/0104-07072017005050015>
- [19] Leite, M. F., Vitta, F. C. F., Carnaz, L., Conti, M. H. S., Marta, S. N., Gatti, M. A. N. ... Vitta, A. (2014). Knowledge and practice of women about cervical cancer in a basic health unit. *Journal of Human Growth and Development*, 24 (2), 208-213. Retrieved from http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S0104-12822014000200014&lng=en&nrm=iso&tlng=en
- [20] Tomasi, E., Oliveira, T.F., Fernandes, P.A.A., Thumé, E., Silveira, D.S., Siqueira, F.V., ..., Facchini, L.A. (2015). Structure and work process in the prevention of cervical cancer in Primary Health Care in Brazil: Access and Quality Improvement Program - PMAQ. *Rev. Bras. Maternal Health. Infante.*, Recife, 15 (2), 171-180. Retrieved from http://www.scielo.br/scielo.php?pid=S1519-38292015000200171&script=sci_abstract&tlng=pt
- [21] Carvalho, B.A., Falavigna, M.F., Silva, M.F., Frazilli R.T.V. Pap smear: academic perception of nursing in Vale do Paraíba. *Rev Eletr Enferm Vale do Paraíba*. 2015; 1 (8): 43-62.
- [22] Alves, S.R., Alves, A.O., Assis, M. C. S. (2016). Popular health education as a strategy for adhering to the Pap smear test. *Cienc Cuid Saude*, 15 (3): 570-574. Retrieved from http://www.revenf.bvs.br/scielo.php?script=sci_arttext&pid=S1677-38612016000300570