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SOCIO-DEMOGRAPHIC AND GYNECOLOGIC ASPECTS OF WOMEN WITH LOW-GRADE CERVICAL INTRAEPITHELIAL NEOPLASIA

ASPECTOS SOCIODEMOGRÁFICOS E GINECOLÓGICOS DE MULHERES COM NEOPLASIA INTRAEPITELIAL CERVICAL DE BAIXO GRAU

ASPECTOS SOCIODEMOGRÁFICOS Y GINECOLÓGICOS DE MUJERES CON NEOPLASIA INTRA-EPITELIAL CERVICAL DE BAJO GRADO

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ABSTRACT

Objective: to analyze the socio-demographic and gynecological aspects of women with CIN I. **Method:** descriptive, retrospective and documentary study, with a quantitative approach. The data were obtained through the analysis of medical records of women diagnosed with CIN I, totaling 123 records. The results were presented in tables with absolute and relative frequency and discussed according to the literature. The project was approved by the Research Ethics Committee, Protocol 199/08. **Results:** most cases of CIN I occurred in women up to 35 years old (71.5%), literate (68.3%), who lived with the partner (52.0%) and with income up to three minimum wages (66.6%). Of these, 61% started sexual life before 17 years old, had reduced variety of partners and only 23.6% used a condom. **Conclusion:** the results ratified the profile of a population vulnerable to acquisition of CIN I with socioeconomic conditions and sex life some predisposing risk factors. **Descriptors:** Women's Health; Health profile; Nursing.

RESUMO

Objetivo: analisar os aspectos sociodemográficos e ginecológicos de mulheres portadoras de NIC I. **Método:** estudo descritivo, documental e retrospectivo, com abordagem quantitativa. Os dados foram obtidos através da análise de prontuários de mulheres com diagnóstico de NIC I, totalizando 123 prontuários. Os resultados foram apresentados em tabelas com frequência absoluta e relativa e discutidos de acordo com a literatura. O projeto foi aprovado pelo Comitê de Ética em Pesquisa, Protocolo 199/08. **Resultados:** a maioria dos casos de NIC I ocorreu em mulheres com até 35 anos (71,5%), alfabetizadas (68,3%), que moravam com o companheiro (52,0%) e com renda até três salários mínimos (66,6%). Destas, 61% iniciou a vida sexual antes dos 17 anos, teve reduzida variedade de parceiros e apenas 23,6% utilizava o preservativo. **Conclusão:** os resultados ratificaram o perfil de uma população vulnerável a aquisição de NIC I com condições socioeconômicas e da vida sexual predisponentes a alguns fatores de risco. **Descritores:** Saúde da Mulher; Perfil de Saúde; Enfermagem.

RESUMEN

Objetivo: analizar los aspectos socio-demográficos y ginecológicos de mujeres portadoras de NIC I. **Método:** estudio descriptivo, documental y retrospectivo, con enfoque cuantitativo. Los datos fueron obtenidos a través del análisis de prontuarios de mujeres con diagnóstico de NIC I, totalizando 123 prontuarios. Los resultados fueron presentados en tablas con frecuencia absoluta y relativa y discutidos de acuerdo con la literatura. El proyecto fue aprobado por el Comité de Ética en Investigación, Protocolo 199/08. **Resultados:** la mayoría de los casos de NIC I se dieron en mujeres con hasta 35 años (71,5%), alfabetizadas (68,3%), que vivían con el compañero (52,0%) y con renta hasta tres salarios mínimos (66,6%). De estas, 61% inició la vida sexual antes de los 17 años, tuvo reducida variedad de compañeros y apenas 23,6% utilizaba el preservativo. **Conclusión:** los resultados ratificaron el perfil de una población vulnerable a adquisición de NIC I con condiciones socioeconómicas y de la vida sexual predisponentes a algunos factores de riesgo. **Descriptores:** Salud de la Mujer; Perfil de Salud; Enfermería.

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INTRODUCTION

Cervical cancer is the second most common in women around the world. More than 500,000 new cases are diagnosed each year, with approximately 274000 deaths, 88% of deaths occurred in developing countries, of which occurred in Africa, 31400 in Latin America and 53000 in the Caribbean, and 159800 in Asia, in East Africa, South-Central, Asia and Melanesia, therefore is the most recurring in women.¹

In Brazil, in 2012, were expected 17,540 new cases of cancer of the cervix (CC), with an estimated risk of 17 cases per 100 000 women. In 2009, this neoplasm represented the third cause of death from cancer in women, with 5,063 deaths, representing the gross mortality rate of 5.18 deaths for each 100 thousand women. With approximately 530 000 new cases per year worldwide, cervical cancer is the third most common cancer among women, being responsible for the death of 275 000 women a year.²

It is known that the emergence of the CC is related to women's sexual behavior and the transmission of infectious agents. In most cases, the presence of infection by human papilloma virus (HPV) is pointed to as a risk factor triggering the CC. In addition, they can cite other factors such as: smoking, low intake of vitamins, multiple sexual partners, early sexual activity, use of oral contraceptives, genetic predisposition, in addition to the low socioeconomic level.³

Unlike other human cancers, cervical cancer is in principle, a preventable disease that presents slowly advancing with long period since the development of the precursor lesions to the emergence of cancer.⁴ Therefore, its prevention is potentially effective.⁵

With regard to strategies of controlling precursor lesions for the CC, it is highlighted the Pap test which consists of analyzing the cellular changes of the cervix and vagina regions, through the collection of cellular material, in search of the presence of any disease that affects the region, such as sexually transmitted diseases (STD), Papillomatosis and HPV, in addition to the amendments tabled in the different phases of the menstrual cycle.⁶⁻⁷ It is possible to detect lesions of cervix pre-invasive which are curable in up to 100% of cases. Cervical lesions are precursors in evolutionary degrees, being classified as cervical intraepithelial neoplasia (CIN) grades I (low-grade lesion), II and III (high grade lesions). Therefore the CIN I is a reversible injury.⁸

The CIN I is the cellular change that affects the basal layers of stratified epithelium of the cervix (mild dysplasia). About 80% of women with this type of injury will present spontaneous regression. CIN II is the existence of cellular breakdown by up to three-quarters of the thickness of the epithelium, preserving more superficial layers (moderate dysplasia). CIN III is the observation of the breakdown in all layers of the epithelium (severe dysplasia and carcinoma in situ), without the underlying connective tissue invasion.⁹⁻¹⁰

Population studies are indispensable to the nurse who attends in CC prevention service, since helping to check the prevalence of low-grade lesions (CIN I), the social, cultural and sexual characteristics of the client, in addition to identifying the co-factors for HPV risk more prevalent, as well as guiding and treat the customers at greater risk of acquiring the virus. It is relevant also to contribute to the definition of public health policies suitable for reduction of rates of CIN I, once its morbidity has increased vulnerability.

With this research, it is believed to contribute to the improvement of the quality of life of this population, because the reduction of rates of CIN I depends on basic actions for prevention and control of predisposing factors, protection policies to women's health and educational improvement of the population. With that, considering the high rate of incidence of cases of CIN I, the ability of HPV infection lead to the CC and the hard cure of disease when diagnosed late, the present study aims to:

- To analyze socio-demographic and Gynecologic aspects of women with CIN I.

METHOD

Descriptive, retrospective and documentary study, with a quantitative approach, being held at the cancer prevention Institute (CPI), located in the city of Fortaleza, where the clients are women over ten years old that are part of the Unified Health System (SUS- Sistema Único de Saúde).

The universe of study was composed of the medical records of women met in the CPI during the year of 2010 with HPV diagnostic e CIN I. The records of this institution are located in the Medical File and statistical service (SAME), being identified by colored label black-HPV, CC-red, yellow-ASCUS (Atypical squamous cells of Undetermined Significance) and green - HPV + CIN I.

Initially, all the medical records of 200 women attended were evaluated, in 2010, with black color labels (HPV) and green (HPV +

CIN I) available by the SAME. Of these, 77 were excluded, because they were incomplete in relation to the registration of the data, allowing a sample of 123 medical records of women with HPV and CIN I.

The data were collected during the months of October and November 2010, by seeking information from the analysis of the medical records of women met in the IPC with HPV and CIN I diagnosed through Pap smear examination and/or biopsy.

A structured form was used as a tool for data collection, in which included socio-demographic variables and gynecological women. This was guided by the own attendance record used in the unit, being populated as the records were analyzed. The data was stored and analyzed by Statistical Package Software for the Social Sciences (SPSS) version 19.0, presented in tables with absolute and relative frequency and discussed according to the literature. The association between categorical variables was analyzed through the Pearson's Chi-square test (χ^2). For all the analyses, a $p<0.05$ value was considered statistically significant.

Ethical and legal aspects involving research with human beings were respected, in accordance with the standards for research contained in resolution No. 196, 1996 of the National Health Council¹¹. The research

project has been approved by the Research Ethics Committee of the Federal University of Ceará, Protocol 199/08.

RESULTS E DISCUSSION

The age group of women with CIN I ranged between 15 and 68 years old, with an average age of 31.6 years old, with most of them (71.5%) up to 35 years old and more than half (52.0%) lived with their partner. According to education, working out of their home and most of the family income were constituted by women literate with up to 8 years of study (68.3%), who worked out of home (69.9%) and they made between one and three minimum wages (66.6%).

In research conducted in Campinas, São Paulo, with 54,338 women, it was found that the prevalence of CIN I, CIN II and III is greater in younger women, while the invasive squamous carcinoma and adenocarcinoma are more frequent with increasing age of the patient, suggesting that there is an evolution to become invasive.¹²

Table 1. Distribution of women with CIN I according to the socio-demographic profile. Fortaleza-CE, 2010.

socio-demographic Data	n=123	%
Age group (in year)		
≤ 35	88	71,5
> 35	35	28,5
Marital Status		
Live with partner	64	52
Live without partner	59	48
Education (in years)		
Literate	13	10,6
01/ago	84	68,3
> 8	26	21,2
Work out of home		
Yes	86	69,9
No	37	30,1
Month Family income (minimum wage)*		
< 1	37	30,1
1 - 3	82	66,6
> 3	4	3,3

*Minimum wage rate at the collection period = R \$415,00

About the marital status, the fact that the number of cases of CIN I in women who live with the partner (52%) and that they do not live (48%) have been similar, can demonstrate that the one who live with the partner that are more exposed to STD, due to confidence in the faithfulness of her partner and with it, they cease to use the methods of prevention.¹³

On the other hand, another aspect is the tendency of unmarried women without regular

partner, constitute a risk factor for HPV infection, due to multiplicity of partners.¹⁴ So this study shows us that both women who live with a partner as those that do not live have similar chances of cellular changes compatible with CIN I, since, at the present time all sexually active women are exposed to these changes, if they do not use condoms.

As regards education, studies show that the low degree of education presents itself as a risk factor for HPV contamination.¹⁵ In this

perspective, it is considered that women with low education level are exposed to a higher risk of morbidity and mortality, because they do not develop actions aimed at health promotion and disease prevention or for seeking health services when the disease is already in a more advanced stage.

The family income of women had variation of R\$ 300.00 to R\$ 4,000.00 averaging R\$ 682,16. The majority (39%) had income of 1 to 2 minimum wages. A study that aimed to evaluate Pap smear test coverage in Pelotas-RS found that women whose family income was equal to or less than a minimum wage, had a 95% higher probability of failing the pap exam than those with incomes greater than ten minimum salaries.¹⁶

It is important to emphasize the low socioeconomic relationship condition and the

HPV infection, considering that women with low family income have less knowledge about this disease and the importance of achieving the Pap smear test.

In relation to gynecological women researched history, the age ranged from 10 to 17 years old with an average of 12.67 years old. The beginning of sexual life (BSL) ranged from 12 to 30 years old, with an average of 12.48 years old. The number of partners per woman presented a 3.4 grade point average, in which most presented only one partner, 61 (49.6%). The most commonly used contraceptive methods were the condom (23.6%) and oral contraceptive (22.8%) (Table 2).

Table 2. Distribution of women with CIN I according to Gynecologic profile. Fortaleza-CE, 2010.

Gynecologic Data	n	%
Woman (in years)		
10 – 12	66	53,7
13 – 15	51	41,4
16 – 17	6	4,9
IVS* (in years)		
ten/16	75	61
17 – 21	40	32,5
22 – 26	6	4,9
>26	2	1,6
Nº of partners		
1	61	49,6
02/more	52	42,2
> 5	10	8,2
Contraceptive Method		
Tubal sterilization	20	16,3
Oral contraceptive	28	22,8
Condom	29	23,6
IUD	1	0,8
Injectable	4	3,3
No use	41	33,3

* IVS = Beginning of Sexual Life

The early beginning of sexual activity, next to menarche, can constitute a risk factor for CIN I, that increase the likelihood of developing cervical cell changes and the ripening uterine cervix total¹³

With this, it must prioritize the age range of women until 35 years old regarding primary prevention against the CC, through encouraging the use of condom, health education actions, strategies to increase the supply of the Pap test, more humanized approach, incorporating HPV vaccine that may arise in future in important tool for CC control.

The acquisition of cervical HPV infection is the primary precursor of a series of events that leads to cervical cancer and this has been thoroughly documented by epidemiological and experimental studies for the past 15 years.¹⁷

Some studies show a slight tendency of women with HPV infection with the beginning of sexual activity before 15 years old.¹⁸⁻⁹ A research on the risk factors for the CC found that women who had the BSL between 10 and 19 years old were three times more likely to develop CIN when compared those who had their first intercourse between 20 and 30 years old²⁰.

This is due to the vulnerability of young women to STD infection, especially HPV, which constitutes one of the main risk factors for the CC.

A study in Canada has examined the primary cervical cancer screening with the HPV test, in which the average age of study participants was 46 years old, of these, 47% attended University, 37% smoked, 56% reported that they already had from 2 to 5 sexual partners.²¹ In this context, health

professionals need to be prepared to promote sexual and reproductive health among this population in order to make them able to understand the risks to which they will be subjected if they do not adopt healthy attitudes to practice safe sex, being of the utmost importance to prioritize assistance to this client.

In relation to the number of sexual partners, study by Noronha et al. pointed to the increased incidence of HPV cervical lesions in women with a higher number of sexual partners during the life¹⁹. One of the factors for the increased risk of acquiring an STD is the variety of sexual partners in the past three months.⁸

In this research, it was investigated the association between the number of partners with the following variables: age, marital status, education, family income and BSL,

being found statistically significant association only with marital status and the BSL ($p < 0.05$) (table 3). Most women who cited have had more than one sexual partner in life, was young (69.4%), lived without the partner (61.3%) had low education (77.4%), had family income above 1 minimum wage (66.1%) and initiated the sexual life before 18 years old (85.5%).

In this way, the study reveals that the early initiation of sexual life and the fact of not having regular partner exposes women to a higher risk of multiple partners and consequently, the greater exposure to sexually transmitted infections.

Table 3. Association between number of partners and age, marital status, education, family income and BSL in women with CIN I. Fortaleza-CE, 2010.

Characteristics	Number of partners		X ²	P
	1	> 1		
	N (%)	N (%)		
Age (years)				
≤ 35	44 (72,1)	43 (69,4)	0,114	0,735
>35	17 (27,9)	19 (30,6)		
Marital Status				
Live with Partner	40 (65,6)	24 (38,7)	8,891	0,003
Live without Partner	21 (34,4)	38 (61,3)		
Educaton (Years)				
≤ 8	49 (80,3)	48 (77,4)	0,156	0,693
> 8	12 (19,7)	14 (22,6)		
Family income				
≤1 minimum salary	16 (26,2)	21 (33,9)	0,854	0,356
> 1 minimum salary	45 (73,8)	41 (66,1)		
BSL (years)				
≤ 17	36 (59,0)	53 (85,5)	10,769	0,001
> 17	25 (41,0)	09 (14,5)		

With regard to the use of contraceptive methods, it is possible to realize that many women are susceptible to sexually transmitted infections, since only a small portion (23.6%) uses the latex male condom as a protection. In the context of the prevention of STDs, the male condom is a resource available to men and women who serves the dual function of protection against pregnancy and sexually transmitted diseases. Even so, are common explicit resistances or veiled to its use by both men and women.²⁰

The no condom use had statistically significant relationship ($p < 0.05$) with the following factors: age, marital status and

menarche (table 4). Most women in the study who did not wear a condom was young (64.9%), lived with partner (57.4%), had low education (79.8%), the age of menarche was before 13 years old (67%) and initiated the sexual life before 18 years old (76.6%). Regarding the association between marital status and the use of condoms is notorious the disuse of the condom among women who live with partner as in who do not live with the partner, with emphasis on those that live with the partner.

Table 4. Association between condom use and age, marital status, education, menarche and BSL in women with CIN I. Fortaleza-CE, 2010.

No use of condom				
Caracteristics	N	%	X ²	p
Age (years)				
≤ 35	61	64,9		
>35	33	35,1	6,564	0,01
Marital Status				
Live with Partner	54	57,4		
Live without Partner	40	42,6	4,683	0,03
Education (years)				
Untill 8	75	79,8		
More than 8	19	20,2	0,205	0,651
Menarch (years)				
Untill 13	63	67		
More than 13	31	33	4,007	0,045
BSL (years)				
Untill 17	72	76,6		
More than 17	22	23,4	3,58	0,058

Study conducted in São Paulo on using contraception methods claims that confidence in the partner is tied to the degree of involvement in the sexual act. The fact of presenting regular partner seems to produce the feeling of a safe sexual meeting, in which the lack of trust (condom use) would shake the relationship.²²

The constant use of condom occurs between singles, so that in their study the entire population married never used the condom²³. Bibliographical study about the use of the condom in the Brazilian population, between 1998 and 2005, showed that when establishing a statistical gradient featuring marital status, this confirms that single people use condoms more frequently than those who are married or with fixed partners.²⁴

Considering that the association between menarche and not use the condom had significance, it can be realized that early menarche leads to increasingly early beginning of sexual activity, often without proper preventive behaviors and as they are not always prepared for sexual initiation, it ends up submitting the risks and frustrations, exposing themselves to STD.

Although it was expected to find statistically significant relationship between education and BSL with no condom use, this did not happen in this study. It was hoped that women with more education used more condoms, given that people have more access to information and to health services.

In the relationship between education and condom use, study found that people with education until elementary school used less the condom (26.2%) than those with higher education (over 40%)²⁴. From all this, it should be noted that the differentiated performance of health professionals is essential to minimize this situation, transmitting the necessary

information more humanized and simple way for this population, clarifying them about STD prevention and, consequently, the CC. However, prevent the CC is not only to avoid the risk factors, but, in addition, make educational approaches and encourage the correct use of the male condom and/or female in all sexual relations, with the aim of preventing HPV infection and for that women are not surprised by undesirable circumstances due to deficiency of knowledge and guidance.

The period of evolution of a cervical lesion to invasively and therefore evil is approximately 20 years. This relatively long period allows efficient preventive action and change the epidemiological picture of the disease. These actions are made by popular education, detection and early diagnosis and treatment of cervical lesions precursors. Acting early, it can change the natural history of the disease, providing the reduction of its morbidity and mortality.²⁵

Over the past century, there has been a reduction in the incidence of cervical cancer and mortality from this disease. This reduction is attributed to the accumulation of knowledge about the etiology of cancer of the cervix and the implementation of health education programs. In Latin America, although developing countries benefit less than more developed countries, the rates of incidence and mortality have shown larger than expected reductions.²⁶

Before the results exposed, it is necessary to raise awareness of the professionals involved, directly or indirectly, in actions against cervical cancer of uterus, since this is a sine qua non for move the epidemiological profile of cervical cancer in our country.²⁶

CONCLUSION

The research provided a picture of women met in the IPC with CIN I diagnostics, showing a profile of socio-economic conditions and sex life some predisposing risk factors, which revealed that deepen the knowledge about the risk factors is of fundamental importance for understanding the everyday habits of a population exposed and thus stimulate preventive practices.

Socio-demographic characteristics found were similar to those of other studies of women with CIN I, composing a population, mostly young, who lives with partner and works outside the home, with low level of education and income. This conclusion confirms the importance of strengthening educational strategies for this audience aimed at the prevention of STD, since, in most cases, they do not have access to adequate information to take care of their own health.

Some gynecologic profile data demonstrated the early beginning of sexual life, little variety of sexual partnerships and low condom use, which shows neglect in promoting sexual health, evidenced by the high rate of women with HPV, in spite of the prevalence of single sexual partnership. Thus, this vulnerable population, lacking of information emphasize the adoption of healthy attitudes for the assurance of a safe sex life.

Given this, analysis of the demographic profile of the client and gynecological with CIN I diagnostics do relevant once health promotion actions can be performed in order to reduce the risk factors presented by these women. In addition, the knowledge of the client for the actions directs assisted real needs observed, which ensures effective and individualized care.

REFERENCES

1. WHO technical specifications: cryosurgical equipment for the treatment of precancerous cervical lesions and prevention of cervical cancer. World Health Organization 2012. Available from: www.who.int.
2. Instituto Nacional do Câncer (Inca). Câncer do colo do útero [Internet]. [cited 2012 Oct 1]. Available from: www.inca.gov.br
3. Murta GF. Saberes e práticas: guia para ensino e aprendizado de enfermagem. 4ª ed. São Caetano do Sul: Difusão; 2008. p. 25.
4. Saraiya M, Lee NC, Blackman D, Smith MJ, Morrow B, McKenna MT. Observations from the CDC. Na assessment of Pap smears and hysterectomies among women in the United States. J Womens Health Gend Based Med [Internet]. 2002 Mar [cited 2012 Oct 1];11(2):103-9. Available from: <http://online.liebertpub.com/doi/abs/10.1089/152460902753645245>
5. Santos ALF, Derchain SFM, Sarian LO, Campos EA, Santos MR, Fonsechi-Carvasan GA. Resultados histológicos e detecção do HPV em mulheres com células escamosas atípicas de significado indeterminado e lesão escamosa intra-epitelial de baixo grau na colpocitologia oncológica. Rev Bras Ginecol Obstet [Internet]. 2004 [cited 2012 Oct 1];26(6):457-62. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010072032004000600006&lng=pt&nrm=iso&tlng=pt
6. Ministério da Saúde (BR). Controle do câncer do colo uterino: Programa Nacional de Controle do Câncer do Colo Uterino. Brasília, DF; 2001. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/control_cancer_colo_uterio_mama.pdf
7. Zeferino LC, Catharino JMR. Desempenho das amostras do canal cervical e do fundo de saco no diagnóstico da neoplasia do colo uterino. Rev Bras Ginecol Obstet [Internet]. 2000 [cited 2012 Oct 10];22(3):129-34. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S010072032000000300002&lng=en&nrm=iso&tlng=pt
8. Secretaria de Saúde do Ceará (BR). Saúde reprodutiva e sexual: um manual para atenção primária e secundária (nível ambulatorial). Fortaleza: SESA-CE; 2002. p. 43.
9. Ministério da Saúde (BR). Prevenção do Câncer do Colo do Útero. Manual Técnico. Profissionais de Saúde; 2002. Available from: http://bvsmms.saude.gov.br/bvs/publicacoes/inca/manual_profissionaisdesaude.pdf
10. Fernandes MAS, Antonio DG, Bahamondes LG. Conhecimento, atitudes e práticas de mulheres brasileiras atendidas pela rede básica de saúde com relação às doenças de transmissão sexual. Cad. Saúde Publica [Internet]. 2000 [cited 2012 Oct 1];16(Supl.1):103-12. Available from: http://www.scielo.br/scielo.php?pid=S0102-311X2000000700009&script=sci_arttext
11. Brasil. Ministério da Saúde. Comissão Nacional de Ética e Pesquisa. Conselho Nacional de Saúde. Manual Operacional para Comitês de Ética em Pesquisa. Série CNS - Cadernos Técnicos, série A, Normas e Manuais Técnicos, n. 133. Brasília; 2002. p. 83-9.
12. FreitasRAP, Carvasan GAP, Morais SS, Zeferino LC. Prevalência das lesões neoplásicas do colo de útero: resultados de

rastreamento citológico realizado em campinas, São Paulo, Brasil. Rev. Ciênc. Méd [Internet]. 2006 [cited 2012 Oct 10];15(4):307-14. Available from: <http://periodicos.puccampinas.edu.br/seer/index.php/cienciasmedicas/article/download/1101/1076>

13. Bezerra JSS, Gonçalves CP, Franco SE, Pinheiro AKB. Perfil de mulheres portadoras de lesões cervicais por HPV quanto aos fatores de risco para câncer de colo uterino. DST - J bras Doenças Sex Transm [Internet]. 2005 [cited 2012 Oct 10];17(2):143-8. Available from: <http://www.dst.uff.br/revista17-2-2005/10-perfil%20de%20mulheres.pdf>

14. Instituto Nacional do Câncer (Inca). Coordenação de Prevenção e Vigilância (Conprev) Falando sobre câncer do colo do útero - Rio de Janeiro: MS/INCA; 2002. Available from:

15. Carret MLV, Fassa AG, Silveira DS, Bertoldi AD, Hallal PC. Sintomas de doenças sexualmente transmissíveis em adultos: prevalência e fatores de risco. Rev Saúde Pública [Internet]. 2004 [cited 2012 Oct 10] 38(1). Available from: <http://www.scielo.br/pdf/rsp/v38n1/18455.pdf>

16. Costa JSD, Olinto MTA, Gigante DP, Menezes AMB, Macedo S. Cobertura do exame citopatológico na cidade de Pelotas, Rio Grande do Sul, Brasil. Cad Saúde Pública [Internet]. 2003 [cited 2012 Oct 10];19(1):191-7. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102-311X2008001100006

17. Rosa MI, Medeiros LR, Rosa DD, Bozzeti MC, Silva FR, Silva BR. Papilomavírus humano e neoplasia cervical. Cad. Saúde Pública [Internet]. 2009 [cited 2012 Oct 11];25(5):[about 5 p]. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102311X2009000500002&lng=en&nrm=iso&tlng=pt

18. Gomes FAM. Fatores associados à infecção clínica e subclínica do trato genital feminino pelo papiloma vírus humano. DST- J bras Doenças Sex Transm [Internet]. 2003 [cited 2012 Oct 11]15(1): 16-22. Available from: <http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=LILACS&lang=p&nextAction=lnk&exprSearch=345584&indexSearch=ID>

19. Noronha VL, Noronha R, Carmona B, Macedo LA, Cruz EM, Naum C et al. Papilomavírus humano em mulheres com citologia oncótica dentro dos limites da normalidade. DST - J bras Doenças Sex Transm

[Internet]. 2005 [cited 2012 Oct 11]17(1):49-55. Available from: <http://www.dst.uff.br/revista17-1-2005/papilomavirushumano.pdf>

20. Faganello MVS, Mercedes T. Da utilização do preservativo masculino à prevenção de DST/aids. Rev C S Col [Internet]. 2008 [cited 2012 Oct 11];13(6):1807-16. Available from: <http://www.scielo.br/pdf/csc/v13n6/a15v13n6.pdf>

21. Ogilvie GS, Krajden M, Niekerk DJ van, Martin RE, Ehlen TG, Ceballos K, Smith LW, Kan L, Cook DA, Peacock S, Stuart GCE, Franco EL, Coldman AJ. Primary cervical cancer screening with HPV testing compared with liquid-based cytology: results of round 1 of a randomized controlled trial - the HPV FOCAL Study. British Journal of Cancer [Internet]. 2012 [cited 2012 Oct 11];1-8. Available from: www.bjcancer.com.

22. Vieira EM, Badiani R, Fabbro ALD, Junior ALR. Características do uso de métodos anticoncepcionais no Estado de São Paulo. Rev Saúde Pública [Internet]. 2002 [cited 2012 Oct 13];36 (3):263-70. Available from: <http://www.scielo.br/pdf/rsp/v36n3/10486.pdf>

23. Holanda ML, Machado MFAS, Vieira NFC, Barroso MGT. Compreensão dos pais sobre a exposição dos filhos aos riscos das DST/Aids. Rev RENE [Internet]. 2006 [cited 2012 Oct 13] 7(1):27-34. Available from: <http://www.revistarene.ufc.br/revista/index.php/revista/article/viewFile/764/pdf>

24. Berquo E, Barbosa RM, Lima LP. Uso do preservativo: tendências entre 1998 e 2005 na população brasileira. Rev Saúde Pública [Internet]. 2008 [cited 2012 Oct 13];42(supl.1):34-44. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S003489102008000800006&lng=en&nrm=iso&tlng=pt

25. Pinho AA, Mattos MCFI. Validade da citologia cervicovaginal na detecção de lesões pré-neoplásicas e neoplásicas de colo de útero. J Bras Patol Med Lab [Internet]. 2002 [cited 2012 Oct 13];38(3):225-231. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1676-24442002000300011&lng=en&nrm=iso&tlng=pt

26. Nomelini RS, Guimarães PDN, Candido PA, Campos ACC, Michelin MA, Murta, EFC. Prevention of cervical cancer in women with ASCUS in the Brazilian Unified National Health System: cost-effectiveness of the molecular biology method for HPV detection. Cad Saúde Pública [Internet]. 2012 [cited 2012 Nov 10];28(11):[about 5 p].

Available from:
http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102311X2012001100004&lng=en&nrm=iso&tlng=en

27. Miranda DB, Valença CN, Oliveira MD de et al. Prevenção de câncer: cobertura do exame citopatológico de colo do útero. J Nurs UFPE [online]. 2012 Apr [cited 2012 Nov 22];6(4):801-7. Available from:
<http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/download/2347/3586>

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