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ORIGINAL ARTICLE

# CHARACTERIZATION NURSES WORKING FOR THE STUDENTS EYE HEALTH

## CARACTERIZAÇÃO DOS ENFERMEIROS ATUANTES NA SAÚDE OCULAR DO ESCOLAR

## CARACTERIZACIÓN DE LAS ENFERMERAS QUE TRABAJAN EN LA SALUD OCULAR DEL ESTUDIANTE

*Raquel Malta Fontenele[1], Ana Inês Sousa[2], Eliane de Fátima Almeida Lima[3]*

**ABSTRACT**

***Objective:*** describing the profile and the actions of nurses at the Family Health Strategy active in the eye health of students. ***Method:*** a cross-sectional study of a quantitative approach and a descriptive analysis in the Planning Area 3.1 in the municipality of Rio de Janeiro, with a population of 94 nurses, between May and June 2013. Statistical analysis conducted using the software Epi-Info. It was approved by the Research Ethics Committee, n. 240.019. ***Results:*** female predominance (84%), aged 20 to 29 (43,6%), married (43,6%) and Catholics (44,7%); 47 (49,9%) had between one and five years of academic training and 72 (76,6%) concluded a degree of specialization. The length of service in the Unit predominated a year of activity (35,1%) and 20 (21,3%) had post of Basic Unit manager. ***Conclusion:*** the data allowed tracing the nurses' profile, emphasizing the need to expanding its operations to actions turned to eye health of students. ***Descriptors:*** Public Health Nursing; Eye Health; School Health; Cross-Sectional Studies.

**RESUMO**

***Objetivo*:** descrever o perfil e as ações dos enfermeiros da estratégia de saúde da família atuantes na saúde ocular do escolar. ***Método:*** estudo transversal com abordagem quantitativa e análise descritiva na Área de Planejamento 3.1 no município do Rio de Janeiro, com população de 94 enfermeiros, no período de maio e junho de 2013. Análise estatística realizada utilizando-se o software Epi-Info. Aprovação do Comitê de Ética em Pesquisa, n. 240.019. ***Resultados:*** houve predominância do sexo feminino (84%), com faixa etária entre 20 aos 29 (43,6%), casados (43,6%) e católicos (44,7%); 47 (49,9%) tinham entre um e cinco anos de formação acadêmica e 72 (76,6%) concluíram o curso de especialização. O tempo de serviço na Unidade predominou em um ano de atuação (35,1%) e 20 (21,3%) tiveram cargo de gerente de Unidade Básica. ***Conclusão:*** os dados permitiram traçar o perfil do enfermeiro, ressaltando-se a necessidade de ampliar sua atuação para ações voltadas para a saúde ocular dos escolares. ***Descritores:*** Enfermagem em Saúde Pública; Saúde Ocular; Saúde Escolar; Estudos Transversais.

**RESUMEN**

***Objetivo:*** describir el perfil y las acciones de las enfermeras de la Estrategia Salud de la Familia que trabajan en la atención de salud en una escuela. ***Método:*** es un estudio transversal de enfoque cuantitativo y análisis descriptivo en el Área de Planificación de 3.1 en el municipio de Río de Janeiro, con una población de 94 enfermeras, entre mayo y junio de 2013. El análisis estadístico fue realizado con el programa Epi-Info. Aprobado por el Comité de Ética en la Investigación, n. 240.019. ***Resultados:*** hubo predominio del sexo femenino (84%), con edades entre 20 y 29 (43,6%), casados (43,6%) y católicos (44,7%); 47 (49,9%) tenían entre uno y cinco años de formación académica y 72 (76,6%) tenían un grado de especialización. El servicio en la Unidad prevalecido una evolución interanual (35,1%) y 20 (21,3%) tenían puesto de gerente de la unidad básica. ***Conclusión:*** los datos permitieron trazar el perfil de la enfermera, haciendo hincapié en la necesidad de ampliar sus operaciones a las acciones de salud ocular en las escuelas. ***Descriptores:*** Enfermería de Salud Pública; Salud de los Ojos; Salud Escolar; Estudios Transversales.

[1]Nurse, Master's Student of Nursing at the Nursing School Anna Nery/ Federal University of Rio de Janeiro. Rio de Janeiro (RJ), Brazil. Email: rmfontenele@hotmail.com; [2]Nurse, Doctorate in Sciences at the Institute Fernandes Figueira/Oswaldo Cruz Foundation, Associate Professor at the Nursing School Anna Nery/UFRJ. Rio de Janeiro (RJ), Brazil. Email: anaineschico@gmail.com; [3]Nurse, Professor, Health Sciences Center, Federal University of Espirito Santo/UFES, Doctoral Student of Nursing, Nursing School Anna Nery/Federal University of Rio de Janeiro/UFRJ. Rio de Janeiro (RJ), Brazil. Email: elianelima66@gmail.com

## INTRODUCTION

According to data released in 2010 in Brazil there are 24,5 million people with a disability and of these, 48,1% are visually impaired. The prevalence of childhood blindness in Brazil is from 01 to 1,5 for every 1.000 children. Among the visually impaired, 148,000 people are blind, and according to estimates, about 90% of the cases could have been avoided with actions of health promotion and prevention.[1] Blindness and visual disturbances have repercussions in society, whereas 80% of the cases could have gone avoided with proper identification and early diagnosis.[2]

Approximately 20% of Brazilian schoolchildren have some eye symptoms and 10% need to wear glasses for refractive error correction (hyperopia, myopia and astigmatism); and there is evidence that 5% of the students have some severe reduction of visual acuity.[3]

Most visually impaired child at school age may go unnoticed by family and caregivers, whether through ignorance or lack of signs and symptoms that shows visual changes. However, at school entry, pre-existing eye disorders are evidenced or can be installed in the course of child development. Such evidence becomes imminent because of the visual effort that is required to carry out the teaching-learning process.

Prevention, health promotion, early diagnosis and vision control are the resources that must be planned and executed in order to reducing cases of burden of visual impairment in children. The nurse plays a fundamental role in this process. The nurses' role about promotion and prevention of vision problems is very important, so that there is a detection of the problem and immediate assistance by the relevant health services, and has the opportunity to have contact with children in their different stages of development. In this context, the nurse can perform orientation with family members, educators and caregivers so that they can identify any altered visual acuity signal.[3-4]

Na international study indicates that nurses working in primary care can provide effective care and achieve positive results for patients health, due to their advanced skill, knowledge and training, highlighting the importance of the nurse in the family health team in order to improving the quality of assistance.[5] Strategic planning, base of primary care nurses working, is vital tool for the design, implementation, monitoring and evaluation of actions that result in positive changes, this fact comes from the eminent demand of individual and collective care beyond the traditional management actions, which has undergone changes not only quantitative but also guided by the principles of the Unified Health System (SUS).[6-7]

As a priority to reorganizing the Brazilian basic attention to the Family Health Strategy (FHS) is to acting under its responsibility with a focus on family and community. In the current context, the work has been undergoing constant changes requiring increasingly diversified activities where the nurse is shown widely asked occupying strategic spaces for the implementation of policies members, among them the promotion of health geared to eye health, including spaces and school environments and enrolled community.[8]

The relationship between School and the Primary Health Network is based on Health Program at School (PSE), which implies shared intersectoral health and education with other social networks for the development of PSE, getting more than a provision of services in the same territory as it must underpin the sustainability of the actions from the conformation of responsibility networks.[3]

National programs like Look Brazil Project and the Health Program at the school, corroborate with such a proposal and thus empowering, assisting and supporting the practice of ocular health promotion in children at school age, demonstrating weakness and so deserving extra attention. [9,3] However, the participation of FHS professionals working on promoting eye of school health aid in the early identification of changes are essential for the control of visual impairment in childhood. However, it is necessary that the team be engaged, in order to promoting health. This study aims to:

- Describing the profile and the actions performed by nurses of the Family Health Strategy working on health promotion with schools, focused on eye health.

## METHOD

This is a descriptive cross-sectional study with a quantitative approach undertaken in the Planning Area 3,1 in the city of Rio de Janeiro; scenery chosen because of practice field of Anna Nery Nursing School - UFRJ, between May and June 2013.

The reference population consisted of all 119 registered nurses in the Family Health Strategy, regardless of their type of contract (contract or statutory), loaded in the aforementioned area. From the nurses, 19 were ineligible because they comply with the inclusion criteria, having less than three

months of activity in the visited Health Unit, being on vacation, maternity leave or residents or students in practical training. The population eligible for the study, there were six losses agenda incompatibility with professionals, even after three attempts. Excluding losses, there were interviewed 94 nurses.

Data collection was conducted through a survey form to the variables of gender, age, marital status, religion, titration, training time, service time in the Family Health Strategy and having already exercised Unit manager role basic. With regard to eye health activities in school, there was asked if the nurse has performed some action to promoting eye health and if so, actions were taken.

There was conducted a descriptive analysis of the data, being presented through figures and absolute and relative frequency tables. The statistical program used was Epi-Info (version 3.5.2).

The study was approved by the Committee of Ethics and Research of the Anna Nery Nursing School of the Federal University of Rio de Janeiro, under number 240.019, in April 2013.

## RESULTS

Table 1 presents the characterization data of nurses inserted in the FHS, between May and June 2103. Among the results highlight the female predominance (84,0%), aged between 20 to 29 in (43, 6%) followed by the age group of 30 to 39 years old (39,4%), the highest percentage is married (43,6%) and Catholics (44,7%).

Regarding the characteristics of professional nurses who are working at the FHS we used the training time variables, title, work experience in the unit and if you have had the post of manager in any Basic Health Unit.

Table 1. Sociodemographic characteristics and training of the population studied, Rio de Janeiro, May and June 2013 (n=94)

| Variables | (n = 94) n | % |
|---|---|---|
| Gender | | |
| Female | 79 | 84,0 |
| Male | 15 | 16,0 |
| Age (in years) | | |
| 20 - 29 | 41 | 43,6 |
| 30 - 39 | 37 | 39,4 |
| 40 - 49 | 12 | 12,8 |
| 50 - 60 | 4 | 4,3 |
| Marital status | | |
| Married or lives in consensual unions | 49 | 52,1 |
| Single (never lived in union) | 34 | 36,2 |
| Separated/Divorced | 10 | 10,6 |
| A Widower | 1 | 1,1 |
| Religion | | |
| Catholic | 42 | 44,7 |
| Evangelical | 27 | 28,7 |
| Spiritist | 12 | 12,8 |
| Adventist | 1 | 1,1 |
| Without religion | 12 | 12,8 |
| Training time | | |
| Months up to one year | 1 | 1,1 |
| Between 1 and 5 years | 47 | 49,9 |
| More than 5 years | 31 | 33,0 |
| More than 10 years | 15 | 16,0 |
| Title | | |
| Graduation | 13 | 13,8 |
| Specialization | 72 | 76,6 |
| Mastership | 7 | 7,4 |
| Non informed | 2 | 2,1 |
| Time of performance in the Family Health Strategy Unit | | |
| 3 months until 1 year | 4 | 4,3 |
| 1 year | 33 | 35,1 |
| 2 years | 24 | 25,5 |
| 3 years | 17 | 18,1 |
| 4 to 10 years | 14 | 14,9 |
| Non informed | 2 | 2,1 |
| Management position in any Basic Health Unit | | |
| Yes | 20 | 21,3 |
| No | 74 | 78,7 |

About half of the study population has between one and five years of academic training (49,9%), and 72 (76,6%) nurses who make up the population said they had

completed the course of expertise. The weather service in Unit who were crowded at the time of data collection had the greatest response one year performance (35,1%) and a further 20 (21,3%) nurses reported having their management position in a prior Basic Health Unit.

Among the respondents, 23 (24,5%) said they did not take any action aimed at eye health in school. From the 71 (75,5%) who reported having taken some action to promote eye health, it was asked to explain the actions taken, as shown in Figure 1.

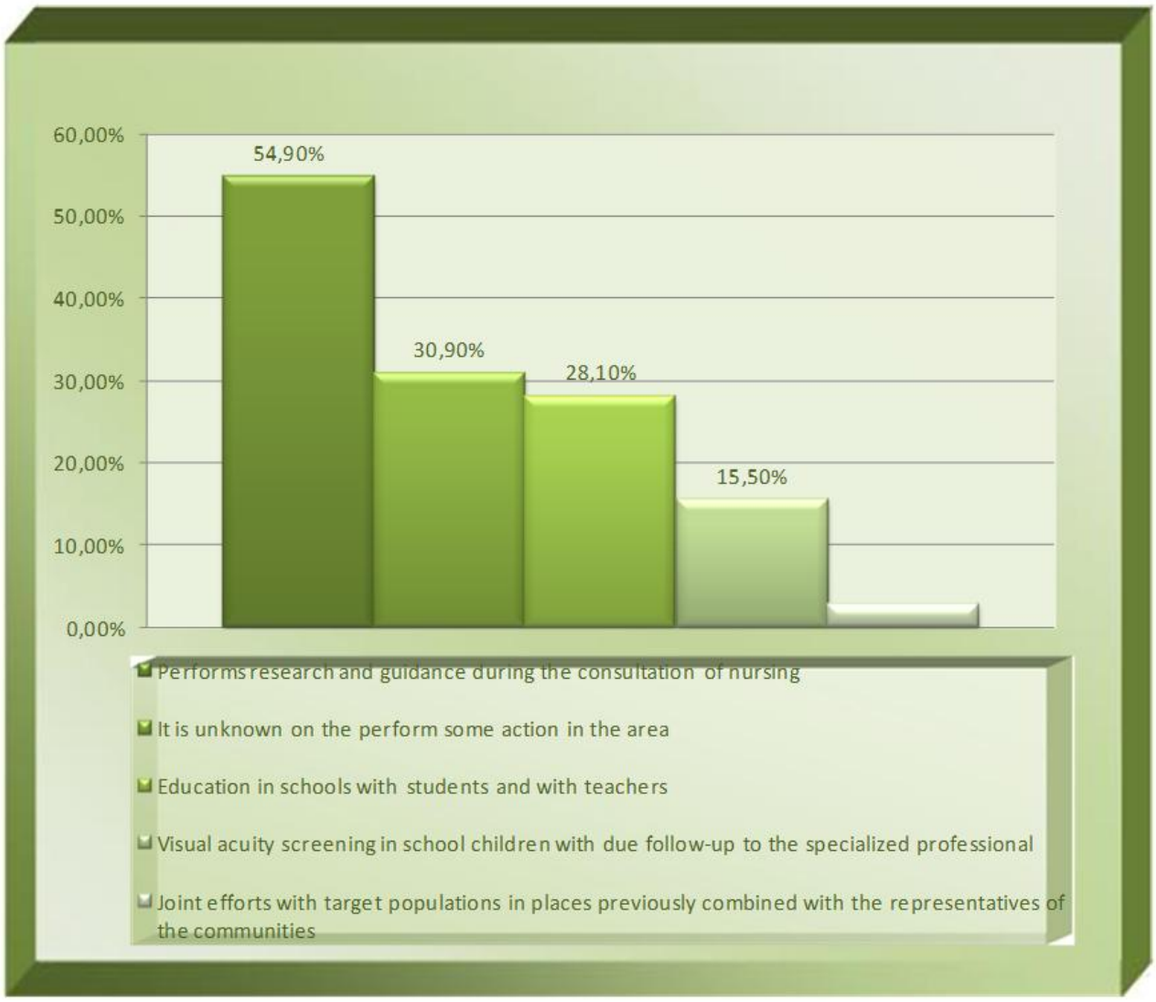


**Figure 1**. Distribution of respondents about which actions are carried out for the promotion of eye health (n=71)
Note: Percentage calculated on the basis of the total number of respondents who said performing actions directed to eye health (n=71).

From respondents who reported having taken some action oriented to eye health, 39 (54,9%) reported having done research and guidance for nursing consultation, and 20 (28,1%) said they had education activities in schools with students and teachers, 11 (15,5%) are performing visual acuity screening in school and routing. However, 22 (30,9%) scored that is performed some action on eye health in the enrolled area, they are unaware.

## DISCUSSION

The Brazilian Constitution guarantees the right to health care for the population and at least 75% of the population depends almost entirely on health services and care offered by the Unified Health System.[10] For both recognizing the actors who work in primary care provides data for understanding problems of human resources in public health, encourages participation and training of professionals.

By characterizing the nurses of the study area, there was a predominance of females among nurses working at the FHS, observed similar results in other studies developed in Santa Catarina and Rio Grande do Sul.[11-12] In the study of nurses working at the FHS in coast of Santa Catarina it was observed that there is a predominance of women, totaling 100% .[10] Similar results were found in Rio Grande do Sul, in a descriptive exploratory cross-sectional study, 95.8% were female. This finding replicates the historical characteristic of nursing profession practiced almost exclusively by women since its inception.[13]

By analyzing the age group, it was found that between 20 and 29 had in a percentage of 43,6%, followed by the age group from 30 to 39 years old with 39,4%. However, the

study conducted in Santa Catarina got the opposite result, where most of the participants were between the ranges of 30 to 39 years old, 50%, demonstrating that the city of Rio de Janeiro, the AP 3,1 predominate young nurses.[11]

The percentage of married or living in a stable union meets the research carried out in Ribeirão Preto in which the percentage of 66% of respondents was married. The fact that the highest percentage of respondents claimed to be Catholics could not be otherwise given that Brazil is a country of extreme religiosity, which was also identified in another study.[13]

The training time can be indicative of time nursing experience in the labor market and relative maturity in decision making and implementation of joint actions of the Health Unit with the community in a targeted and feasible way. To highlight our findings, similar results were observed in southern Brazil, where 75,0% have completed graduation for at least five years and 28.0% worked in the FHS for less than a year.[12]

What is expected to investigate the operating time emerges from the hypothesis that the greater work experience in the FHS, the greater the chances of experiencing different experiences in the profession and assist in the creation of a link between staff and users. The professional experience, institutional involvement and stability acquired by length of service are factors that stimulate stay in the professionals in an organization and also the working time in an institution may be associated with the work proposal of an institution and individual satisfaction.

The highest percentage of respondents who reported having completed a course of specialization is similar to the results of the above study, conducted in southern Brazil, which showed that 89% of nurses working at the FHS had some kind of expertise, confirming our results.[12]

The nurse is the professional capable of developing health education, using actions to promoting individual and collective health to achieve significant changes in health, highlighting the manager posture in health and nursing management action. The findings of this research show that 21,3% of respondents have already exercised a position of manager of the Basic Health Unit, which suggests the competence of nurses in their work process in the execution of the activities of competence of the Family Health Strategy.

In view of the findings on the implementation of actions for eye health in school, highlights the importance of detecting vision problems in children even in pre-school and school age, is due to the fact that this age group is the full development of the visual apparatus, so the resolution of identified problems would be much larger and the consequences could be reduced or even avoided.[5]

With regard to eye health activities in school, the findings show that the morbidity profile in Brazil adolescents reveals the presence of chronic diseases, psychosocial disorders, drug-addiction, sexually transmitted diseases and other health problems. However, the problem requires the healthcare team of family planning actions to reduce health problems, involving other sectors of society (such as school), the community and especially the family so they can be guaranteed better living conditions to this public specific, making sure the idea that the FHS must interact with schools in your area to promote health and improve quality of care.[14]

The eye exam is an enriching evaluation of the examination routine throughout the development of the child, and the Family Health Team, it is important to detecting obvious eye diseases and those asymptomatic and insidious course.[14] Studies have investigated basic nurses attention that should be able to apply visual acuity tests periodically or forward to perform such a test on children who were enrolled in its health units.[1,4,14]

Methods to analyze specific visual functions such as dynamic visual acuity test, can play an important role in the future of school, these tests are key elements in the development of age-related multifactorial. An international study shows that the goal of preschool visual screening is to identify children with possible visual problems, ensuring appropriate and timely evaluation, providing early intervention specialist as needed. [15]

With regard to prevention, it is notable that the most widely used and inexpensive technique corresponds in a screening at school performing the test of visual acuity. Visual acuity is the level of fitness of the eye to identify spatial details, namely the ability to perceive the shape and contour of the object.[9] About the technique of measuring visual acuity, the simplest way to diagnose impairment of vision is measuring visual acuity with Snellen chart Decimal optometric.[16]

As evidence that the relationship of primary care with the school environment, is a fertile environment for the formation of future citizens engaged in the care of your health and free to make health choices. The representation of primary care in the school environment is strengthened by the promotion

of health measures, carried out by the Family Health Teams, which have a close relationship with your enrolled community. It is evident that to be a significant change in the care model and scope of actions in extra environmental health unit, you need to redirect the organization and distribution of actions and services in order to satisfactorily respond to the demands and health needs.[17]

The relationship of nurses of basic attention with the school environment is seen in other countries, such as Norway where usually practicing health nurses, who work in primary care, are assigned to geographical area, providing universal services in child health clinics and school health services. They make house calls and perform vaccination and screening of development, but also advise and guide the community to avail the services in child health clinics. In Norway, 2.069 nurses are working in municipal health of the family at clinics and school health services.[18]

## CONCLUSION

The analyzed data allowed tracing the nurse profile, noting the possibility of encouraging the professional nurse to work at the FHS, so that there is professional stimulus for the professional user and entity relationship is established with confidence, strengthening primary care and highlighting the precepts of the National Health System. To seeking the fullness of health actions focused on primary care, it is necessary that nurses active in the area know clients assisted by the service, in order to plan and execute actions.

We emphasize the need for the nurse to expand its operations to actions in schools and are encouraged to apply acuity tests periodically or forward to perform such a test in children who are enrolled in enrolled area of health centers are crowded.

It is expected that the nurses who work at the FHS perform comprehensive care (health promotion and health protection, disease prevention, diagnosis, treatment, rehabilitation and health maintenance) to individuals and families in the family health unit, and, when indicated or necessary, at home and/or in other community spaces. Search visual acuity in school identifies primary care nurses to be the best approach for a good yield in the process of learning school, obtaining improvements that will support the development with quality of life of children. The delay or even no treatment of children with changes in visual acuity suffering from any eye refraction, seriously worses the visual prognosis, especially in amblyopia and strabismus association.

Among the study's limitations, it is worth noting the difficulties in applying the questionnaires to suit the interviewer and the programming schedules of nurses of some of the units. Units which have obtained greater loss were precisely those containing more nurses, this occurred due to lack of programming and prior knowledge of how and when the nurses were in the unit on the day of pre-scheduled visit with the Manager. However, it is noteworthy that the CAP 3.1, along with supporters in health, offered full support for the collection happening safely and effectively, so no unit was visited without the presence of supporting professionals in health, which are responsible for monitoring of health indicators in the area.

It is evident the need for carrying out more researches with emphasis on work process of nurses within the framework of the basic attention, seeking to discuss the results, allowing dissemination of results and generating information so that you contemplate permanent education activities with the prospect of contributing to the professional qualification and improvement of quality of care.

## REFERENCES

1. Cezario KG, et al. Promoção da saúde e deficiência visual: produção das pós-graduações brasileiras. Rev Rene [Internet]. 2010 Apr/June [cited 2013 Sept 20]; 11(2): 187-96. Available from: http://www.revistarene.ufc.br/vol11n2_pdf/a21v11n2.pdf

2. Vergas MA, Rodrigues MLV. Perfil da demanda em um serviço de oftalmologia de atenção primária. Rev bras oftalmol. [Internet]. 2010 Mar/Apr [cited 2012 Sept 19]; 69 (2): 77-83. Available from: http://www.scielo.br/pdf/rbof/v69n2/a02v69n2.pdf doi: 10.1590/S0034-72802010000200002

3. Brasil. Ministério da Saúde / Ministério da Educação. Programa Saúde na Escola. Manual Instrutivo Programa Saúde na Escola 2013. [Internet]. 2013 [cited 2013 Sept 10]. Brasília (DF): Ministério da Saúde / Ministério da Educação; 2013. Available from: http://portal.saude.gov.br/portal/arquivos/pdf/manual_planeja.pdf

4. Laignier MR, Castro M de A, SÁ PSC. De olhos bem abertos: investigando acuidade visual em alunos de uma escola municipal de Vitória. Esc Anna Nery. [Internet]. 2010 Jan/Mar [cited 2012 Sept 20]; 14(1), 113-19. Available from:

http://www.scielo.br/pdf/ean/v14n1/v14n1a17.pdf doi: 10.1590/S1414-81452010000100017

5. Parker R, Forrest L, Ward N, McCracken J, Cox D, Derrett J. How acceptable are primary health care nurse practitioners to Australian consumers?. Collegian [Internet]. 2013 Mar [cited 2013 Sept 10]; 20(1):35-41. Available from: http://ac.els-cdn.com.ez29.periodicos.capes.gov.br/S1322769612000297/1-s2.0-S1322769612000297-main.pdf?_tid=f1344eea-3f40-11e3-ad9b-00000aacb360&acdnat=1382903571_4fffe82d7ab3b75d7e735c330b92540d

6. Mendes IAC. Strategic planning and actions in health: nursing's contributions to the strengthening of global health. Rev Latino-Am Enferm [Internet]. 2009 May/June [cited 2013 Sept 13]; 17(3):283. Available from: http://www.scielo.br/pdf/rlae/v17n3/01.pdf doi: 10.1590/S0104-11692009000300001

7. Matumoto, S et al. Production of nursing care in primary health care services. Rev Latino-Am Enferm [Internet]. 2012 July/Aug [cited 2013 Sept 10]; 20(4): 710-17. Available from: http://www.scielo.br/pdf/rlae/v20n4/11.pdf doi: 10.1590/S0104-11692012000400011

8. Silva R, Olegário T, Costa D, Duarte F, Nelson A, Prado N. Análise contextual do trabalho do enfermeiro na atenção básica – revisão integrativa. J Nurs UFPE on line [Internet]. 2013 Oct [cited 2013 Oct 20];7(10): Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/2533 doi: 10.5205/reuol.4397-36888-6

9. Brasil. Ministério da Saúde / Ministério da Educação. Projeto Olhar Brasil: triagem de acuidade visual: manual de orientação. [Internet]. 2008 [cited 2013 Sept 10]. Brasília (DF): Ministério da Saúde / Ministério da Educação; Available from: http://portal.saude.gov.br/portal/arquivos/pdf/MANUAL_PROJETO_OLHAR_BRASIL.pdf (Série A. Normas e Manuais Técnicos). ISBN 978-85-334-1419-8.

10. Palmero EI, et al. Population prevalence of hereditary breast cancer phenotypes and implementation of a genetic cancer risk assessment program in southern Brazil. Genet Mol Biol. [Internet]. 2009 July [cited 2013 Sept 10]; 32(3): 447-55. Available from: http://www.scielo.br/pdf/gmb/v32n3/2008-173.pdf doi: 10.1590/S1415-47572009005000058

11. Benito GAV, Pinheiro SR. Gestão do trabalho: concepções sobre o processo de trabalho gerencial do enfermeiro na atenção básica/estratégia saúde da família. In: Anais do 2º SITEn - Seminário Internacional sobre o Trabalho em Enfermagem [evento na internet];17-19 abril 2008; Curitiba, BR. Curitiba: ABEn 2008 [cited 2013 Aug 03]. Available from: http://www.abennacional.org.br/2SITEn/Arquivos/N.059.pdf

12. Ramos CS, Heck MT, Ceolin T, Dilélio AS, Fachini LA. Perfil do enfermeiro atuante na estratégia saúde da família. Cienc Cuid Saude [Internet]. 2009 Dec [cited 2013 Aug 03];8(supl.):85-91. Available from: http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/9722/5535 doi: 10.4025/cienccuidsaude.v8i0.9722

13. Barros TB, Maia ER, Pagluica LMF. Facilidades e dificuldades na assistência ao idoso na estratégia de saúde da família. Rev Rene [Internet]. 2011 Oct/Dec [cited 2013 Aug 03];12(4):732-41. Available from: http://www.revistarene.ufc.br/revista/index.php/revista/article/view/291/pdf

14. Rivemales MCC, Souza RG, Souza MKB. Sistema de Informação da Atenção Básica como instrumento de gestão: estudo de caso em Santo Antônio de Jesus / BA. Online braz j nurs [Internet]. 2012 Apr [cited 2013 Sep 13];11(1)}[about 5 p.].. Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/3552 doi: http://dx.doi.org/10.5935/1676-4285.20120021

15. Al-Rowaily MA. Prevalence of refractive errors among pre-school children at King Abdulaziz Medical City, Riyadh, Saudi Arabia. Saudi J Ophthalmol [Internet]. 2010 Apr [cited 2013 Oct 27];24(2):45-8. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3729549/pdf/main.pdf doi: 10.1016/j.sjopt.2010.01.001

16. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Básica. Caderno de Atenção Básica - Saúde na Escola. Brasília (DF): Ministério da Saúde, 2009 [cited 2013 Sept 10]. (Série B. Textos Básicos de Saúde) (Cadernos de Atenção Básica; n. 24) ISBN 978-85-334-1644-4.

17. Oliveira-Junior, JC; Souza, MKB. A humanização nos serviços da atenção básica de saúde: concepções de profissionais de saúde. J Nurs UFPE on line [Internet]. 2013 June [cited 2013 Sept 29]; 7(5):4370-7: Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/3378/pdf_2729 doi: 10.5205/r euol.4164-33013-1-SM.0706201308

17. Clancy A; Leahy-Warren P; Rose Day M; Mulcahy H. Primary Health Care: Comparing

Public Health Nursing Models in Ireland and Norway. Nurs Res Pract [Internet]. 2013 Feb [cited 2013 Sept 29]; 1 (2013): 1-9. Available from: http://www.hindawi.com/journals/nrp/2013/426107/cta/ doi:10.1155/2013/426107

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**Corresponding Address**

Raquel Malta Fontenele
Rua Riachuelo, 257
Ap. 518
Bairro Centro
CEP 20230-011 – Rio de Janeiro (RJ), Brazil