



# Journal of Nursing

Revista de Enfermagem

UFPE On Line

ISSN: 1981-8963

## ORIGINAL ARTICLE

### LIFESTYLE AND HEALTH OF THE NURSE THAT WORKS THE NIGHT SHIFT ESTILO DE VIDA E SAÚDE DO ENFERMEIRO QUE TRABALHA NO PERÍODO NOTURNO ESTILO DE VIDA Y SALUD DEL ENFERMERO NOCTURNO

Eliana Lessa Cordeiro<sup>1</sup>, Tânia Maria da Silva<sup>2</sup>, Edane Cunha da Silva<sup>3</sup>, José Edson da Silva<sup>4</sup>, Raísa Ferreira Galdino Alves<sup>5</sup>, Liniker Scolfild Rodrigues da Silva<sup>6</sup>

#### ABSTRACT

**Objective:** to investigate changes in the lifestyle and health of nurses working the night shift. **Method:** an exploratory-descriptive study, with a quantitative approach, consisting of 50 nurses who work at night shift. The data were obtained with a questionnaire containing 26 questions. Descriptive statistical analysis was performed using Microsoft Office Excel 2007. Data were presented in tables. **Results:** 24 (48%) reported having a good health condition, even though, for 40 of these professionals (80%), their physical health and / or emotional problems interfered in their daily social activities. **Conclusion:** changes in the lifestyle and health of nurses, working night shift, reveal determinants that can lead to health problems. **Descriptors:** Night Work; Occupational Health; Nurses.

#### RESUMO

**Objetivo:** averiguar as modificações no estilo de vida e saúde do enfermeiro que trabalha no período noturno. **Método:** estudo exploratório-descritivo, com abordagem quantitativa, constituído por 50 enfermeiros que atuam no plantão noturno. Os dados foram obtidos com um questionário contendo 26 questões. Foi realizada a análise estatística descritiva, por meio do Microsoft Office Excel 2007. Os dados foram apresentados em tabelas. **Resultado:** 24 (48%) relataram ter boa condição de saúde, mesmo que, para 40 desses profissionais (80%), a saúde física e/ou problemas emocionais interferiram nas suas atividades sociais cotidianas. **Conclusão:** as modificações no estilo de vida e saúde do enfermeiro, que trabalha em plantão noturno, revelam determinantes que podem levar a agravos à saúde. **Descritores:** Trabalho Noturno; Saúde do Trabalhador; Enfermeiros.

#### RESUMEN

**Objetivo:** averiguar las modificaciones en el estilo de vida y salud del enfermero que trabaja por la noche. **Método:** estudio exploratorio-descriptivo, con abordaje cuantitativa, constituído por 50 enfermeros que actúan en la guardia nocturna. Los datos fueron obtenidos con un cuestionario conteniendo 26 preguntas. Se realizó una evaluación estadística descriptiva, por medio de Microsoft Office Excel 2007. **Resultados:** 24 (48%) relataron estar en buena condición de salud, que sólo, para 40 de estos profesionales (80%), la salud física y / o problemas emocionales interfirieron en sus actividades sociales cotidianas. **Conclusión:** las modificaciones en el estilo de vida y salud del enfermero, que trabaja en guardia nocturna, revelan determinantes que pueden llevar agravios a la salud. **Descriptores:** Trabajo Nocturno; Salud Laboral; Enfermeros.

<sup>1</sup>Nurse, Master, Neuropsychiatry and Behavioral Sciences Program, Federal University of Pernambuco/UFPE. Recife (PE), Brazil. E-mail: [elianalessa18@hotmail.com](mailto:elianalessa18@hotmail.com); <sup>2</sup>Biologists, Master in Education, Federal University of Pernambuco/UFPE. Recife (PE), Brazil. E-mail: [tanitamaria@ig.com](mailto:tanitamaria@ig.com); <sup>3,4,5</sup>Nurse (egress), Salgado de Oliveira University/UNIVERSO. Recife (PE), Brazil. E-mail: [edanecunha@hotmail.com](mailto:edanecunha@hotmail.com); [edsonlimoeiro@hotmail.com](mailto:edsonlimoeiro@hotmail.com); [raisagaldino@hotmail.com](mailto:raisagaldino@hotmail.com); <sup>6</sup>Nurse, Specialist in Obstetrics and Gynecology (Women's Health), University of Pernambuco, Hospital Agamenon Magalhaes/UPE/HAM. Recife (PE), Brazil. E-mail: [liniker\\_14@hotmail.com](mailto:liniker_14@hotmail.com)

INTRODUCTION

Quality of life at work can be classified as the satisfaction of the members of an organization, of their personal needs, through their experiences in their work environment. These needs are different among people, they change with time, and the reactions between satisfaction and non-satisfaction also suffer variations.<sup>1</sup>

Given the issues of quality of life and health of the worker, a significant advance in the quality of life of the health services provided to the workers can be provided. Within this context, the professional in the health area often acts in favor of the well-being of its clients, leaving aside the care with their own health. It is worth noting that the longer the time spent at work, the less time left for other roles, increasing the probability of work-family conflict.<sup>2-3</sup>

In this discussion, the Health System uses some procedures to organize the work, dividing into shifts, and it is worth noting that, in Nursing, the night shift is intended to provide better assistance on a continuous basis, in addition to meeting all demand Of the population in health services.<sup>4</sup>

Article 73, §2, of Law No. 5,452, of May 1<sup>st</sup>, 1943, refers to night work (comprised from 10 pm a day to 5 a.m. of the following day). Also in article 73, and the first paragraph, it says that the night work time will be computed as 52 minutes and 30 seconds, and its remuneration will be increased by at least 20% at the daytime. Nursing workers perform the activities in the morning shifts, comprised between 7am and 1pm; afternoon, between 1pm to 7pm and night, from 7pm to 7am.<sup>5-4</sup>

The work environment of health professionals exposes them to numerous physical, chemical, physiological, psychic, mechanical and, especially, biological risks related to the development of their activities. Among the characteristics of the Nursing work, there are concentration requirements, keeping the professional in alert states, agility, with collection of their services, as well as work shift management and supervision of team work, among other activities. And this requires research that identifies the quality of life of these professionals, as well as the assistance provided by them during the night.<sup>6-4</sup>

The process of caring for the nurse and other staff members, technicians and Nursing assistants, in the night shift allow many situations, such as acting autonomously, managing rationally their own choices, which can be a positive factor for job satisfaction.

However, there are some that can be faced as a great difficulty in participating in the spaces promoted by the institution in the daytime period, and can be considered as exhausting and distressing for this professional category.<sup>7</sup>

The increase in the rhythms and working hours, resulting from the globalization process, has altered the worker's quality of life, directly interfering in the health-disease process of these workers.<sup>8</sup> In this context, it is emphasized that there are some physiological changes that can affect them, such as attention and concentration, feelings of malaise, fatigue, mood swings, gastrointestinal and cardiovascular diseases. Thus, starting from the assumption of these disorders, the health of the night worker, there is a need to adapt the human organism, once accustomed to daytime habits.<sup>9-10</sup> Thus, although nurses who work in the night period present perceptions of quality of life, demonstrating variations of this concept, referring, in the majority, that quality of life refers to the attendance of their basic necessities such as housing, social and family life, health, laser, decent work, among others.<sup>2</sup>

The question that is proposed to study is to investigate the modifications in the lifestyle and health of the nurse who works in the nocturnal period. This issue seems to be important, given the researchers 'concern about nurses' reports of night shift in the face of unfavorable situations and impacts in their lifestyle, their physical, mental and emotional health, besides the recurrent errors of low complexity Nursing procedures , in this work shift. Thus, the study becomes relevant, since there is a need to take care of oneself, to find ways, to face adversities that, clearly, have a negative impact on one's health.

The study aims to contribute to identify changes in the lifestyle and health of nurses working at night, showing the warning signs for possible consequences related to nocturnal habits, investigating how this shift has influenced their lifestyle and health.

OBJECTIVE

- To investigate changes in the lifestyle and health of nurses working at night time.

METHOD

A descriptive, exploratory study with a quantitative approach, performed at the Agamenon Magalhães Hospital (AMH) in the city of Recife, Brazil. Fifty nurses attending the night shift participated in the study. The inclusion criteria were: to be members of the night shift scale and to be acting as a nurse

for more than one year. Among the exclusion criteria, are: workers who are on holiday or leave and have been nurses for less than one year.

To collect the data, a questionnaire containing 26 questions regarding the demographic characterization was used, such as sex, age, marital status, family income, as well as work, in regard to working time and on-call duty; Questions related to aspects resulting from night work, such as sleep and changes and biopsychosocial. The questionnaires were sealed in individual envelopes and delivered to the statistician for statistical analysis, using Software for Windows 8, Microsoft Office Excel 2007, from the Microsoft Office 2007 package. For the analysis of the data, a descriptive statistics by

percentage and absolute number was used. The data was presented in tables.

The accomplishment of this research was authorized by the approval of the research project by the Ethics Committee of the AMH, under CAAE number: 26505013.9.0000.5197, and the data was collected in the respective places of work of the participants, after signing the Statement of Consent by said institution and the signing of the Informed Consent Form (ICF) by the participants.

RESULTS

The data, presented in table 1, integrate relevant information about the sample surveyed regarding the socioeconomic variables of the 50 nurses interviewed.

Table 1. Distribution of nurses regarding sociodemographic data, Recife (PE), Brazil, 2014.

Characteristics	Specifications	N=50	%
Sex	Male	01	02
	Female	49	98
Age	25 to 35 years	05	10
	36 to 45 years	32	64
	46 to 55 years	10	20
	> 55 years	03	06
Service time	<2 years	04	08
	Between 2 years ago	11	22
	> 8 years	35	70
Marital status	Single Children:	11	22
	Married	23	46
	Divorced Children	14	28
	Daughter		
Home	Consensual Union	02	04
	Home	43	86
	Apartment	07	14
How many people live with you	Live alone	07	14
	1 person	13	26
	2 people	18	36
	3 people	10	20
Family income	More than 3 people	02	04
	From 1 to 3 minimum wages	11	22
	Exceeding 4 minimum wages	39	78
Contribution to Family Income	The professional	26	52
	Spouse / Unemployed	15	30
	Father mother	09	18

Table 2, shows the health conditions, as well as the working conditions of nurses working at night.

Table 2. Distribution of nurses according to health status, on-call regime, rest time at the institution where they work and means of transportation used, Recife (PE), Brazil, 2014.

Characteristics	Specifications	N=50	%
Health conditions	Good	24	48
	Reasonable	20	40
	Bad	06	12
Privacy Policy	12 / 60hs	29	58
	Uninformed	21	42
Rest Time at the Institution	3 hours or more	29	58
	Uninformed	21	42
Means of Transport Used to Coming to Work	Public transportation	12	24
	Own transport	37	74
	On foot	01	02

Table 3, shows the disadvantages encountered by nurses working at night. It can be stated that 40 (80%) of the interviewees have physical health and / or emotional problems, as well as social activities interfered due to night shift, and (74%) stated that they did not have enough breaks to rest.

Table 3. Nurses' aspects related to the disadvantages of working at night shift, Recife (PE), Brazil, 2014.

Characteristics	Specifications	N=50	%
Physical Health and / or emotional problems related to Social Activities	Interfere	40	80
	Does not interfere	10	20
Sexual Life Related to Physical and Mental Fatigue	Altered	28	56
	No change	22	44
Beware of Personal Appearance	Ever	09	18
	Sometimes	29	58
	Rarely	14	28
Difficulties to perform simple tasks such as: moving a table, lifting or loading groceries, running and / or sweeping	Have difficulties	5	10
	Have no difficulties	45	90
Risk of falling asleep when reading a book or newspaper, watching television while waiting for a movie at the cinema and at the end of the meal	Yes	20	40
	No	30	60
They feel tired in doing pleasurable activities	Yes	27	54
	No	23	46
Not having enough breaks to rest	Yes	37	74
	No	13	26

Table 4, shows the relationship of the interviewees regarding rest, sleep, Nursing activities, feeding and gastrointestinal disorders. It is noteworthy that there is influence on sleep deprivation in 45 (90%) and 40 (80%) of nurses have difficulties to perform some Nursing procedure in the aspect of physical and mental fatigue.

Table 4. Distribution of aspects of nurses working at night shift according to rest environment, sleep characteristic, Nursing activities, feeding and gastrointestinal alterations, Recife (PE), Brazil, 2014.

Characteristics	Specifications	N=50	%
Rest at work environment	Suitable	28	56
	Not suitable	22	44
Quality of Sleep at Time of Rest	They have	28	56
	Do not have	22	44
Time taken to sleep at rest	After 30 min	23	46
	After 20 min	13	26
	Immediately	10	20
	Can not sleep	04	8
Sleep Deprivation	Suffers influence	45	90
	Not influenced	05	10
Difficulty in performing the Nursing procedure	Physical and mental fatigue	40	80
	No difficulty	10	20
feeding	Changed for snack	21	42
	Not altered	13	26
	Altered part	16	32
Gastrointestinal disorders	Heartburn	15	30
	Gastritis	12	24
	Diarrhea	9	18
	No change	14	28

DISCUSSION

The results in relation to the nurses' profile, mentioned the number of women found in this health institution (98%). In understanding this process, it is necessary to consider the influence of Florence Nightingale in institutionalizing, in Victorian England (1862), a profession for women, for which they are "naturally prepared", from values considered to be feminine.<sup>11</sup>

In relation to the age group, between 36 and 45 years (44%), these workers are characterized by maturity, when the individual has an identity formed. However, despite the maturity, a large number of singles (32%) were observed. This shows us that much of the population is putting the professional career first. Thus, only after entering the labor market do they think about establishing a family.<sup>12</sup>

Regarding family income, the majority (78%) report receiving more than four minimum wages, but it is a fact that the economic condition is determinant for the sustainability of healthier living habits, the acquisition of quality food, investment in physical exercise practices, constant medical monitoring for the evaluation of their health status, family leisure activities, among others. However, 11 respondents (22%) mention earning from one to three minimum wages. Thus, with these low wages, Nursing workers can be impelled to seek other jobs, in order to guarantee the minimum necessary for their own and their own survival and well-being, adding other reasons for adopting the double and / or triple working hours. Consequently,

the multiple journeys lead to an increase in exposure to occupational hazards, favoring the installation of the illness process.<sup>13</sup>

Another aspect that should be mentioned is that the professionals interviewed report, in their majority (58%), a 12 / 60h shift. This situation assists in the consolidation of a professional culture that leads the worker to assume two or more jobs for different reasons: low wages; Facilities to reconcile work in two or more labor institutions; Permissiveness of labor laws, among others. Still, it is important to remember that there is a strong possibility of a second working day for most of the interviewees, since, considering that the sample consisted mostly of female workers, there is a good chance that these women will take on the tasks as another labor activity, without remuneration.<sup>13</sup>

In relation to their diet, 74% report unhealthy food practices, which is often justified by the high workload, adding up the daily loads of the different employment links, which makes it impossible for the worker to prepare more food at home. To be taken into the workplace. It should also be emphasized that the fact that the institution does not offer healthy meals makes it difficult to nutritionally balanced daily meals.<sup>13</sup>

It should also be emphasized that, as well as poor dietary habits, physical inactivity is also an aggravating factor for the health of these professionals, given that when asked about the means of transportation used to get to work, only one interviewee, corresponding to 2 %, mentions a brief walk to get to work, refraining from car use.



Regarding gastrointestinal changes, the health profile of these workers shows that there are already established pathologies that require special care, given the possibility of further deteriorating the health and quality of life of workers. Many diseases mentioned may have an association with Nursing work, which is stressful and predisposed to generate or aggravate some diseases such as musculoskeletal diseases, gastritis, allergies, vascular diseases, among others.<sup>14</sup>

In 2009, the Federal Highway Police recorded almost 2,400 accidents caused by sleep and one of three traffic accidents, one is caused by the sleep of the driver. This fact exacerbates the expressive number of night-time nurses who use their own transportation for arrival and departure (74%), contributing even more to possible automobile accidents.<sup>15</sup>

The social implications are common in night workers. As a result of this conditioning, there is a mismatch from this work shift affecting the family relationship, mainly between husband and wife.<sup>16</sup>

The quest for improved sleep is reduced so that productivity is greater than quality, which, in fact, does not classify good care and can harm the end result of the service, leading the professional to commit any type of iatrogeny.<sup>9</sup>

## CONCLUSION

It was possible to verify that the modifications in the lifestyle and health of the nurse, who works on night shift in the HAM, revealed determinants that can lead to health problems, such as: the large number of women inserted in the context, with view on the double work shift that, consequently entails personal and health problems; high working hours (12 / 60h); When these workers replace the main meal with a quick snack; impaired social and family life; insufficient rest breaks; impaired sleep, among others. All these problems culminate in the possibility of having poor quality of health and service, since with the aggravating of sleep, these workers are more subject to possible errors, influencing the quality of the service provided.

There is a need for constant analysis, given that the results demonstrated a condition that requires changes, highlighting the constant changes in the nurses' profile, and with this, possible changes in the profile demonstrated here. The need for a close look at the situations presented is made necessary, as well as making them aware of the research carried out, for a better awareness about self-

care and the aggravating factors related to their health.

From these findings, it is suggested, as actions to be developed in this health institution, policies that assure, to these workers, medical, psychological and nutritional monitoring so that the nightshift nurse, carries out their work activities without causing so much damage to their health and, as for the professional, to return to the practice of physical activities, leisure activities, mainly in relation to the family, conciliation of work and rest, healthy eating habits, control and prevention of chronic diseases, for health preservation.

## REFERENCES

1. Antonioli SAC, Emmel SV, Ferreira GE, Paz P de O, Kaiser DE. Trabalho offshore e a atuação do enfermeiro embarcado: uma revisão integrativa. Rev Esc Enferm USP [Internet]. 2015 [cited 2017 Apr 16];49(4):689-98. Available from: [http://www.scielo.br/pdf/reeusp/v49n4/pt\\_0080-6234-reeusp-49-04-0689.pdf](http://www.scielo.br/pdf/reeusp/v49n4/pt_0080-6234-reeusp-49-04-0689.pdf)
2. Neves MJAO, Branquinho NCSS, Paranaguá TTB, Barbosa MA, Siqueira KM. Influência do Trabalho noturno na qualidade de vida do enfermeiro. Rev enferm UERJ [Internet]. 2010 [cited 2013 Apr 15];18(1):42-7. Available from: <http://www.facenf.uerj.br/v18n1/v18n1a08.pdf>
3. Cezar-Vaz MR, Bonow CA, Almeida MCV de, Sant'Anna CF, Cardoso LS. Carga de trabalho e fatores associados: estudo em porto marítimo do Brasil. Rev Latino-Am Enfermagem [Internet]. 2016 [cited 2017 Apr 16];24(2837):1-10. Available from: [http://www.scielo.br/pdf/rlae/v24/pt\\_0104-1169-rlae-24-02837.pdf](http://www.scielo.br/pdf/rlae/v24/pt_0104-1169-rlae-24-02837.pdf)
4. Silva MR, Beck CLC, Magnago TSBS, Carmagnani MIS, Tavares JP, Prestes FC. Trabalho noturno e a repercussão na saúde dos enfermeiros. Esc Anna Nery Rev Enferm [Internet]. 2010 [cited 2013 Apr 15];15(2):2070-76. Available from: <http://www.scielo.br/pdf/reben/v63n6/18.pdf>
5. Ministério do Trabalho (BR). Decreto-Lei n. 5.452, de 1º de maio de 1943. Consolidação das Leis do Trabalho [Internet]. Brasília: Ministério da Saúde; 1943 [cited 2013 Mar 20]. Available from: <http://www2.camara.leg.br/legin/fed/declei/1940-1949/decreto-lei-5452-1-maio-1943-415500-publicacaooriginal-1-pe.html>
6. Vitale SA, Varrone-Ganesh J, Vu M. Nurses working the night shift: Impact on home,

- family and social life. *J Nurs Educ Pract* [Internet]. 2015 [cited 2017 Apr 16];5(10):70-8. Available from: <http://www.sciedu.ca/journal/index.php/jnep/article/viewFile/7294/4497>
7. Silva-Costa<sup>1</sup> A, Griep RH, Rotenberg L. Disentangling the effects of insomnia and night work on cardiovascular diseases: a study in nursing professionals. *Braz J Med Biol Res* [Internet]. 2015 [cited 2017 Apr 16];48(2):120-7. Available from: <http://www.scielo.br/pdf/bjmb/v48n2/1414-431X-bjmb-1414-431X20143965.pdf>
8. Caixeta CRCB, Borges CRC, Iwamoto HH, Camargo FC. Há “desgaste” do trabalho noturno entre os profissionais de enfermagem? *Saúde Coletiva* [Internet]. 2012 [cited 2014 June 19];09(57):89-93. Available from: <http://www.redalyc.org/pdf/842/84223419005.pdf>
9. Phiri LP, Draper CE, Lambert EV, Kolbe-Alexander TL. Nurses’ lifestyle behaviours, health priorities and barriers to living a healthy lifestyle: a qualitative descriptive study. *BioMed Central* [Internet]. 2014 [cited 2017 Apr 16];13(38):1-11. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/25506262>
10. Silva CDLS, Pinto WM. Riscos ocupacionais no ambiente hospitalar: fatores que favorecem a sua ocorrência na equipe de enfermagem. *Saúde Coletiva em Debate* [Internet]. 2012 [cited 2013 Apr 19];2(1):62-9. Available from: <http://fis.edu.br/revistaenfermagem/artigos/vol02/artigo10.pdf>
11. Agosti MT, Andersson I, Ejlertsson G, Janlöv Ann-Christin. Shift work to balance everyday life - a salutogenic nursing perspective in home help service in Sweden. *BioMed Central* [Internet]. 2015 [cited 2017 Apr 16];14(2):1-11. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Shift+work+to+balance+everyday+life+-+a+salutogenic+nursing+perspective+in+home+help+service+in+Sweden>
12. Griffiths P, Dall’Ora C, Simon M, Ball J, Lindqvist R, Rafferty Anne-Marie Rafferty. Nurses’ Shift Length and Overtime Working in 12 European Countries The Association With Perceived Quality of Care and Patient Safety. *Med Care* [Internet]. 2014 [cited 2017 Apr 16];52(11):975-81. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4196798/>
13. Souza NVDO, Cunha LS, Pires AS, Gonçalves FGA, Ribeiro LV, Silva SSLF. Perfil socioeconômico e de saúde dos trabalhadores de enfermagem da Policlínica Piquet Carneiro.

- REME rev min enferm [Internet]. 2012 [cited 2014 May 19];16(2):232-240. Available from: <http://www.reme.org.br/artigo/detalhes/524>
14. Silva DSD, Tavares NVS, Alexandre ARG, Freitas DA, Brêda MZ, Albuquerque MCS, Neto VLM, et al. Depressão e risco de suicídio entre profissionais de Enfermagem: revisão integrativa. *Rev Esc Enferm USP* [Internet]. 2015 [cited 2017 Apr 16];49(6):1027-36. Available from: [http://www.scielo.br/pdf/reeusp/v49n6/pt\\_0080-6234-reeusp-49-06-1027.pdf](http://www.scielo.br/pdf/reeusp/v49n6/pt_0080-6234-reeusp-49-06-1027.pdf)
15. Junior AAS, Komnitski C. A condução veicular e o distúrbio do sono. *Rev Ord Pública Defesa Social* [Internet]. 2011 [cited 2013 May 19];4(1,2) Suppl. 1,2:111-20. Available from: <https://rop.emnuvens.com.br/rop/article/view/40/39>
16. Silva-Costa A, Rotenberg L, Griep RH, Fischer FM. Cochilos durante o trabalho noturno em equipes de enfermagem: possíveis benefícios à saúde dos trabalhadores. *Esc Anna Nery Rev Enferm* [Internet]. 2015 Jan/Mar [cited 2017 Apr 16];19(1):33-9. Available from: <http://www.scielo.br/pdf/ean/v19n1/1414-8145-ean-19-01-0033.pdf>

Submission: 2016/12/25

Accepted: 2017/08/03

Publishing: 2017/09/01

**Corresponding Address**

Liniker Scolfild Rodrigues da Silva  
Rua Santa Terezinha, 70  
Bairro Cavaleiro  
CEP: 54250-580 – Jaboatão dos Guararapes (PE), Brazil