

MINOR PSYCHOLOGICAL DISORDERS IN NURSING WORKERS IN A SURGICAL WARD

DISTÚRBIOS PSÍQUICOS MENORES EM TRABALHADORES DE ENFERMAGEM DE UM BLOCO CIRÚRGICO

DISTURBIOS PSÍQUICOS MENORES EN TRABAJADORES DE ENFERMERÍA DE UN CENTRO QUIRÚRGICO

Lauren Leal Ferreira¹
Evelin Daiane Gabriel Pinhatti²
Cinthy Kallyane Gonçalves Queiroz³
Renata Perfeito Ribeiro⁴

How to cite this article: Ferreira LL, Pinhatti EDG, Queiroz CKG, Ribeiro RP. Minor Psychological Disorders in nursing workers in a Surgical Ward. Rev baiana enferm. 2019;33:e28279.

Objective: analyzing the proportion of Minor Psychological Disorders in nursing workers in a Surgical Ward and the factors associated with these disorders. **Method:** descriptive, exploratory, and quantitative study, carried out with 54 nursing workers. For data collection, this study used a structured questionnaire with sociodemographic and occupational characteristics, the Brazilian version of the Self-Reporting Questionnaire-20 and the Demand Control Support Questionnaire. **Results:** the proportion of Minor Psychological Disorders was 24.1%. The psychosocial aspects were mostly classified as developing a work with a low psychological burden (63.0%), low control (70.4%), and low social support (72.2%). The variables female sex and control at work presented statistically significant correlations to the outcome. **Conclusion:** the results have shown the proportion of 24.1% of Minor Psychological Disorders among nursing workers in the setting of the study. Regarding associated factors, the female sex and control at work presented a significant association with the outcome.

Descriptors: Surgicenter. Nursing. Occupational Health. Workers. Mental Disorders.

Objetivo: analisar a proporção e os fatores associados aos Distúrbios Psíquicos Menores em trabalhadores de enfermagem de um Bloco Cirúrgico. Método: estudo descritivo, exploratório, de abordagem quantitativa, realizado com 54 trabalhadores de enfermagem. Para a coleta de dados, utilizou-se questionário estruturado contendo características sociodemográficas e ocupacionais, a versão brasileira do Self Reporting Questionnaire-20 e o Demand Control Support Questionnaire. Resultados: a proporção de Distúrbios Psíquicos Menores foi de 24,1%. Em relação aos aspectos psicossociais, foram predominantemente classificados como desenvolvendo um trabalho com baixa demanda psicológica (63,0%), baixo controle (70,4%) e baixo apoio social (72,2%). Das variáveis investigadas, apresentaram associação estatisticamente significativa com o desfecho o sexo feminino e o controle no trabalho. Conclusão: os resultados evidenciaram a proporção de 24,1% para os Distúrbios Psíquicos Menores

¹ Nurse. Independent researcher. Londrina. Paraná. Brazil. lauren.leal96@gmail.com.

² Nurse. MS in Nursing. Independent Researcher. Londrina. Paraná. Brazil.

³ Nurse. Occupational Health Nurse at Belagrícola Comércio e Representações de Produtos Agrícolas S.A. Londrina, Paraná, Brazil.

⁴ Nurse. Concluded Post-doctoral Studies in Nursing. Adjunct Professor at the Nursing Graduation Course at Universidade Estadual de Londrina. Londrina, Paraná, Brazil.

nos trabalhadores de enfermagem do local estudado; quanto aos fatores associados, o sexo feminino e o controle no trabalho apresentaram associação significativa com o desfecho.

Descritores: Centro Cirúrgico. Enfermagem. Saúde do Trabalhador. Trabalhadores. Transtornos Mentais.

Objetivo: analizar la proporción de Disturbios Psíquicos Menores en trabajadores de enfermería de un Centro Quirúrgico y factores asociados a esos Disturbios. Método: estudio descriptivo, exploratorio, de abordaje cuantitativo, con la participación de 54 trabajadores de enfermería. Para la colección de los datos, se utilizó un cuestionario estructurado conteniendo características sociodemográficas y ocupacionales, la versión brasileña del Self-Reporting Questionnaire-20 y el Demand Control Support Questionnaire. Resultados: la proporción de Disturbios Psíquicos Menores fue de 24.1%. Con respecto a los aspectos psicosociales, se los clasificó mayoritariamente como el desarrollo de un trabajo con bajas exigencias psicológicas (63.0%), poco control (70.4%), y poco apoyo social. Entre las variables investigadas, el sexo femenino y el control en el trabajo presentaron asociación estadísticamente significativa con el resultado. Conclusión: los Disturbios Psíquicos Menores presentaron una proporción de 24.1% entre los trabajadores de enfermería del sitio estudiado; con respecto a los factores asociados, el sexo femenino y el control en trabajo presentaron asociación significativa con los resultados.

Descritores: Centro Quirúrgico. Enfermería. Salud del Trabajador. Trabajadores. Trastornos Mentales.

Introduction

In the first decades of the 21st century, the job market went through a great expansion in factors related to the economy, to the increase of technology, access to information and innovations. The preoccupation that stems from these changes, when it comes to health and to the safety of workers in the workplace, has led workers to develop in-depth studies that address these issues⁽¹⁾.

In the field of health, studies have shown that professionals are exposed to many occupational hazards that may affect their physical and mental health. These risks are often related to the exposition to an increasingly stressful daily life, with exhaustive routines, inadequate work conditions, dealing with pain, suffering, and the lack of material resources and other materials that can help in their work⁽²⁻³⁾.

In this setting, the nursing categories are the most commonly mentioned, due to their constant contact with suffering, death, multiple work journeys, work overload, and salaries that are not proportional to the work being executed. As a consequence, these workers are susceptible to physical and psychological diseases⁽⁴⁾.

Researches point out that there is an even greater chance of disease for those who work in sectors that are critical and isolated, such as

the Surgical Wards (SW), which are made up of Surgicenters, Anesthetic Recovery Rooms (ARR), and a Central of Materials and Sterilization (CMS). This is due to the characteristics of these places, such as little natural lighting, restricted access of people, excessive noise from equipment, among others, which, with time, increase the odds that symptoms that are detrimental to the health of workers will develop⁽⁵⁻⁶⁾.

Those who work in the Surgicenter and in the ARR are plunged into an environment in which they are demanded to have technological knowledge and to be agile in their working process. Studies indicate that there are strong hierarchical relations that may favor power relations and lead to internal conflict, in addition to the risks inherent to physical exposures and consequent musculoskeletal health problems⁽⁷⁻⁸⁾. Also connected to this problem are the few resting hours, due to the fact that the workers who work in the peri-operative environment are under a strong demand⁽⁹⁾.

The CMS, despite being an essential part of the health services, as it helps reducing infection rates, is seen as a unit that offers indirect assistance to the patient. That means that their work is not as valued, and leads to the idea that the work produced there is invisible. Therefore,

transferring to the CMS many workers that are unable to offer patient care, have complex relations with the team, difficulties to learn, and physical restrictions at work, has become the norm⁽¹⁰⁾.

Regarding mental diseases, the Minor Psychological Disorders (MPD) are characterized by showing depressive and anxious symptoms, such as sadness, fatigue, diminution of concentration, irritability, insomnia, and somatic complaints⁽¹¹⁾. MPDs have been frequently mentioned in literature as causes for mental disorders in workers, especially in researches carried out in the hospital environment. Studies carried out in Rio Grande do Sul and Bahia point out the prevalence of 33.7% and 35.0%, respectively, of these disorders in a this type of environment⁽¹²⁻¹³⁾.

Considering the assumption that those who work in the SW are exposed to conditions that favor the development of mental health symptoms, it is relevant to investigate the state of the mental health of these workers, since knowledge on their current health situation may aid in the elaboration of measures to deal with the situation in practice.

Therefore, this study aims to analyze the proportion of Minor Psychological Disorders in nursing workers in a Surgical Ward and the factors associated with them.

Method

This is a descriptive, exploratory, quantitative study, carried out in a large-sized University Hospital in the state of Paraná, Brazil.

The population of the study included 71 nursing workers who worked in the SW. The inclusion criteria contemplated active SW nursing workers. Were excluded those who had come back to work for less than 30 days (which is the criteria of one of the instruments used in this research). Therefore, 62 workers were in accordance to the eligibility criteria, among whom 8 refused participation. To calculate the sample size, the following formula, for finite populations, was used:

$$n = N.p.q. (Z\alpha / 2)^2 / (N-1) . (E)^2 + p.q. (Z\alpha / 2)^2$$

The sample was stratified according to professional category, and calculated using a confidence interval of 95%, a maximum error of 5%, and a proportion of 50%, resulting in a higher sample size. Therefore, the minimal sample size included 7 nurses, 18 nursing auxiliaries, and 29 nursing technicians.

Data was surveyed using a structured questionnaire with questions regarding sociodemographic and occupational characteristics of the workers. To measure the MPD, the Brazilian version of the Self-Reporting Questionnaire (SRQ-20) was used, with 20 questions with two possible answers each to screen for non-psychotic mental disorders, evaluating depressive, somatic, and anxiety symptoms that took place in the last 30 days. The cutoff point was seven or more positive responses⁽¹⁴⁾.

Data collection was carried out from November 2016 to January 2017. The questionnaires were delivered and recollected by one of the authors in the workplace of the participants, after the objectives of the research had been clarified and the Free and Informed Consent Form (FICF) had been signed.

The psychosocial aspects were evaluated with the support of the Demand Control Support Questionnaire (DCSQ), adapted by Töres Theorell in 1988⁽¹⁵⁾. The Brazilian version is made up of 17 questions, with three dimensions that evaluate psychological demand, control at work, and social support. Among the five questions that evaluate the psychological demand, four refer to time and to the speed in which the work is performed, while one assesses the conflicts there are between the different demands. From the six questions regarding control at work, four refer to the use and development of abilities and two to the autonomy for decision making in the working process. Six questions evaluate the social support between administration and workers⁽¹⁶⁾. The dimensions were categorized as (high/low), and their cutoff point was the median,

calculated after the asymmetrical distribution of data was verified.

To analyze the data, the software Statistical Package for the Social Sciences (SPSS), version 20.0, was used. To characterize the sample, descriptive analysis were carried out using absolute and relative frequencies for the categorical variables. For the continuous variables, measures of central tendency and dispersion were used. For associations between the MPD (dependent variable) and sociodemographic and occupational variables, and the DCSQ model, the Chi-square test was used, considering as significant the variables with $p < 0.05$. It should be highlighted that, in the analyses, the proportion was used as a measure of the occurrence, and the

difference between proportions, as a measure of association.

This research was in accordance to recommendations from Resolution n. 466, from December 12, 2012. It was approved by the Research Ethics Committee, under Certificate of Submission to Ethical Assessment (CAAE) n. 58056916.0.0000.5231.

Results

The sample studied was made up of 54 nursing workers. The losses from participation refusals summed 12.9%. The proportion of suspected Minor Psychological Disorders was 24.1%. Table 1 shows the sociodemographic and occupational characteristics of participants, as associated to the MPD.

Table 1 – Sociodemographic and occupational characteristics of nursing workers from a surgical ward, as associated to the Minor Psychological Disorders. Paraná, Brazil – 2016-2017 (n=54) (continued)

Sociodemographic and Occupational Characteristics	n (%)	Minor Psychological Disorders		p-value ⁽¹⁾
		Yes	No	
Sex				
Female	44 (81.5)	13	31	0.049
Male	10 (18.5)	-	10	
Age				
30 - 39 years old	11 (20.3)	3	8	0.854
40 - 49 years old	23 (42.6)	6	17	
50 - 59 years old	18 (33.3)	4	14	
>60	2 (3.8)	-	2	
Marital Status				
Single	9 (16.7)	1	8	0.603
Married/Stable Union	32 (59.2)	8	24	
Divorced/Separated/Widow	13 (24.1)	4	9	
Children				
Yes	46 (85.2)	11	35	0.947
No	8 (14.8)	2	6	
Instruction level				
Technical education	3 (5.6)	-	3	0.633
Higher education	26 (48.2)	7	19	
Specialization	21 (38.8)	6	15	
Master's degree/PhD	4 (7.4)	-	4	
Function				
Nursing auxiliary	18 (33.3)	6	12	0.216
Nursing technician	29 (53.7)	7	22	
Nurse	7 (13.0)	-	7	

Table 1 – Sociodemographic and occupational characteristics of nursing workers from a surgical ward, as associated to the Minor Psychological Disorders. Paraná, Brazil – 2016-2017 (n=54) (conclusion)

Sociodemographic and Occupational Characteristics	n (%)	Minor Psychological Disorders		p-value ⁽¹⁾
		Yes	No	
Time working in the institution				
Up to 5 years	5 (9.3)	-	5	0.353
6 - 10 years	9 (16.7)	3	6	
11 - 20 years	18 (33.3)	3	15	
>20 years	22 (40.7)	7	15	
Shift				
Day	38 (70.4)	9	29	0.918
Night	16 (29.6)	4	12	
Income⁽²⁾ (n=32)⁽³⁾				
Up to 4 minimum wages	8 (25.0)	3	5	0.304
4 - 7 minimum wages	13 (40.6)	4	9	
>7 minimum wages	11 (34.4)	1	10	

Source: Created by the authors.

Note: Conventional signal used:

- Numerical data equal to zero not resulting from rounding up.

(1) p-value: chi-squared test;

(2) Minimum salary in 2017: R\$ 937,00;

(3) Participants who answered the question about income.

Among the workers who were suspected of having MPD, 53.8% were classified as having low psychological demands, 53.8% as having high control at work, and 84.6% as having low social

support. In the analysis of association, only the control at work was associated to the MPD, as show in Table 2.

Table 2 – Association between psychosocial aspects of the work and Minor Psychological Disorders of nursing workers from a surgical ward. Paraná, Brazil – 2016-2017 (n=54)

Demand-control model and social support	n (%)	Minor Psychological Disorders		p-value ⁽¹⁾
		Yes	No	
Demand				
Low	34 (63.0)	7	27	0.435
High	20 (37.0)	6	14	
Control				
Low	38 (70.4)	6	32	0.028
High	16 (29.6)	7	9	
Social support				
Low	39 (72.2)	11	28	0.219
High	15 (27.8)	2	13	

Source: Created by the authors.

(1) p-value: chi-squared test;

Table 3 shows the frequency of affirmative responses and the group of SRQ-20 symptoms. The mean of affirmative answers for the SRQ-20 was 4.8 (± 3.8), with a minimum of zero and a maximum of fifteen. The group of symptoms with the greatest number of positive responses

was the group of somatic symptoms (75.9%), followed by the depression-anxiety symptoms (72.2%), and the symptoms for vital energy diminution (64.8%) and depressive thoughts (18.5%).

Table 3 – Distribution of answers according to the SRQ-20 groups in surgical ward nursing workers. Paraná, Brazil – 2016-2017 (n=54)

Symptom Groups	n	(%)
Depressive-anxious humour		
Do you feel nervous tense or worried	28	(51.8)
Are you easily frightened	18	(33.3)
Do you feel unhappy	19	(35.1)
Do you cry more than usual	7	(12.9)
Somatic Symptoms		
Do you often have headaches	27	(50.0)
Do you sleep badly	23	(42.5)
Do you have uncomfortable feelings in your stomach	21	(38.8)
Is your digestion poor	19	(35.1)
Is your appetite poor?	4	(7.4)
Do your hands shake	4	(7.4)
Vital Energy Decrease		
Are you easily tired	19	(35.1)
Do you find it difficult to make decisions	7	(12.9)
Do you find it difficult to enjoy your daily activities	15	(27.7)
Is your daily work suffering (is your work a chore, brings you suffering)	4	(7.4)
Do you feel tired all the time	18	(33.3)
Do you have trouble thinking clearly	11	(20.3)
Depressive Thought		
Are you unable to play a useful part in life	2	(3.7)
Have you lost interest in things	8	(14.8)
Has the thought of ending your life been in your mind	1	(1.8)
Do you feel that you are a worthless person	3	(5.5)

Source: Created by the authors.

Discussion

In this study, the proportion of MPD was 24.1%. In a study carried out with health workers from Bahia, a prevalence of 21.0% was found⁽¹⁷⁾. On the other hand, a study carried out in Rio Grande do Sul found a prevalence of 33.7%⁽¹²⁾, also finding that workers are twice as much likely to have reduced work ability when the prevalence of MPD suspicion is high⁽¹²⁾.

In the sample investigated, MPD had a significant association to the variable sex. It should be considered that, in addition to having a predominantly female population, the suspicion of MPD in this study was evidenced only among women. In the historic profile of nursing, the female sex predominates, and that remains true. Literature describes that many women face double work journeys, the second one being work in the domestic environment, with high requirements both in professional and

domestic environments, which increases their psychological overload⁽¹⁸⁾.

When considering the characteristics of the workers in the study, a higher proportion of MPD was found in workers that were married or in stable unions. The additional workload imposed on the working woman in her personal environments, associated to a depleting workplace, increases the likelihood of mental health problems stemming from excessive demand⁽¹⁸⁾.

It became clear, in this investigation, that only nursing auxiliaries and technicians presented MPD. This result is in accordance to those of other researches, which also found MPD to be more predominant in these categories when compared to nurses^(12,19). Some factors may explain this result, such as the nurse having a better control over their own working process, due to the administrative activities they are executing, in addition to occupying a position that is more widely recognized in the work environment and in society⁽²⁰⁾.

It was also found that individuals from the sample being evaluated had a higher educational level than the one required for the activities they were performing, meaning that even though they were acting as nursing auxiliaries or technicians, they had concluded graduations and specializations. This is a fact that may lead to feelings of not being valued and feeling unmotivated, since they have knowledge that goes beyond the requirements for the activities they perform⁽¹²⁾.

Regarding the time working in the institution, the highest prevalence of MPD was among workers who worked there for more than 20 years. Therefore, the longer period working there may be seen as a factor that predisposes the worker to become diseased. Studies state that the constant exposition to a stressful work environment, with high work demands and low recognition, increases, in the long term, the likelihood of the worker becoming sick, be it with physical or psychological problems^(8,21).

Regarding the working shift, the results here are in disagreement with literature evidence,

which suggests that working at night may lead to disease⁽²¹⁾. This may be explained by the characteristics of these wards in the night period, since they only attend to emergencies then, thus diminishing their work load.

The low psychological demand of the work in the SW may be seen as a beneficial aspect by these workers, since high demands increase the risk of unbalance between personal and professional life. On the other hand, the lack of control was evidenced as significant with regards to the MPD. It is an element with negative effects for occupational development, since it can lead to the loss of abilities and of motivation for tasks⁽²²⁾.

The low social support is a factor that has been recognized as detrimental for workers, since recent studies conducted on the field of nursing have found that social support is an important factor that opposes the negative effects that work can bring to individuals⁽²³⁻²⁴⁾.

Regarding the symptom groups, higher prevalences were found in the somatic symptoms and depressive/anxious humor groups. The higher frequency of these factors may be seen as a result of the influence of the contemporary world, especially in sectors that involve high technological density, in which the excess of simultaneous information may worsen somatic responses⁽²⁵⁾.

Therefore, it is still important to highlight the setting in which nursing categories develop their work. In these environments, the psychological demands are meaningful, due to the daily coexistence with suffering and poor work conditions. These factors predispose these workers to emotional alterations, leading to negative symptoms that may result in psychological diseases⁽⁴⁾.

Among the limitations of this study is the possibility of the healthy worker effect, since the investigation was carried out in the workplace. In addition, the small-sized sample investigated does not allow for the results to be generalized. And finally, the fact that data was self-reported may lead to an underestimation of the real particularities of the respondents.

Conclusion

The results have shown the proportion of 24.1% for MPD among nursing workers in the SW studied. Regarding associated factors, the female sex and control at work presented a significant association with the outcome.

Variables that were more frequently associated with MPD were the female sex, age from 40-49, married or in stable union, higher education, nursing auxiliaries or technicians, more than 20 years working in the institution, and income from 4-7 minimum wages.

Although MPDs did not have significant associations to most investigated variables, they were present in nearly one every four workers. Therefore, the detrimental effects mental diseases have on individuals and society must be considered, since these workers are healthcare providers. As a result, it is paramount to implement measures to promote health at work, organizational improvement, investments in support networks that seek to favor interpersonal relationships, in addition to making viable strategies that promote personal development, as to prevent mental disorders.

This study is expected to contribute in furthering the scientific knowledge in nursing, and the promotion of improvement in work conditions for those who work in a hospital environment, especially SW nursing workers.

Collaborations:

1. conception, design, analysis and interpretation of data: Lauren Leal Ferreira, Evelin Daiane Gabriel Pinhatti and Renata Perfeito Ribeiro;

2. writing of the article and relevant critical review of the intellectual content: Lauren Leal Ferreira, Evelin Daiane Gabriel Pinhatti, Cinthya Kallyane Gonçalves Queiroz and Renata Perfeito Ribeiro;

3. final approval of the version to be published: Lauren Leal Ferreira, Evelin Daiane Gabriel Pinhatti, Cinthya Kallyane Gonçalves Queiroz and Renata Perfeito Ribeiro.

References

1. Merlo ARC, Bottega CG, Perez KV. Apresentação. In: Merlo ARC, Bottega CG, Perez KV, organizadores. *Atenção à saúde mental do trabalhador: sofrimento e transtornos psíquicos relacionados ao trabalho*. Porto Alegre: Evangraf, 2014. p. 8-11 [Internet]. [cited 2018 Aug 20]. Available from: http://cippto.com/wp-content/uploads/2017/03/atencao_completo.pdf
2. Sousa VFS, Araújo TCCF. Estresse ocupacional e resiliência entre profissionais de saúde. *Psicol Ciênc Prof* [Internet]. 2015 [cited 2018 Sep 3];35(3):900-15. DOI: <https://doi.org/10.1590/1982-370300452014>. Available from: <http://www.scielo.br/pdf/pcp/v35n3/1982-3703-pcp-35-3-0900.pdf>
3. Alves AP, Pedrosa LAK, Coimbra MAR, Miranzi MAS, Hass VJ. Prevalência de transtornos mentais comuns entre profissionais de saúde. *Rev Enferm UERJ* [Internet]. 2015 [cited 2018 Sep 3];23(1):64-9. DOI: <https://doi.org/10.12957/reuerj.2015.8150>. Available from: <http://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/8150/12330>
4. Teixeira CAB, Gherardi-Donato CAB, Pereira ECS, Cardoso SS. Estresse ocupacional e estratégias de enfrentamento entre profissionais de enfermagem. *Enferm Glob* [Internet]. 2016 Oct [cited 2018 Aug 20];44:299-309. Available from: http://scielo.isciii.es/pdf/eg/v15n44/pt_administracion3.pdf
5. Souza VS. Qualidade de vida dos profissionais de enfermagem atuantes em setores críticos. *Rev Cuid* [Internet]. 2018 [cited 2018 Sep 5];9(2):2177-86. DOI: <http://dx.doi.org/10.15649/cuidarte.v9i2.506>. Available from: <https://www.revistacuidarte.org/index.php/cuidarte/article/view/506>
6. Lögde A, Rudolfsson G, Broberg RR, Rask-Andersen A, Walinder R, Arakelian E. I am quitting my job. Specialist nurses in perioperative context and their experiences of the process and reasons to quit their job. *Int J Qual Health Care* [Internet]. 2018 [cited 2018 Sep 5];30(4):313-20. DOI: <https://doi.org/10.1093/intqhc/mzy023>
7. Silva ROC, Batista KM, Grazziano ES. Personalidade resistente nas equipes médica e de enfermagem em centro cirúrgico. *Rev SOBEC* [Internet]. 2014 [cited 2018 Sep 5];19(4):214-8. DOI: [10.5327/Z1414-4425201400040007](https://doi.org/10.5327/Z1414-4425201400040007). Available from: https://www.researchgate.net/publication/300082481_Personalidade_resistente_nas_equipes_medica_e_de_enfermagem_em_centro_cirurgico

8. Tostes MFP, Silva AQ, Garçon TL, Maran E, Teston EF. Dualidade entre satisfação e sofrimento no trabalho da equipe de enfermagem em centro cirúrgico. *Rev SOBECC* [Internet]. 2017 [cited 2018 Sep 25];22(1):3-9. DOI: <https://doi.org/10.5327/Z1414-4425201700010002>. Available from: <https://revista.sobecc.org.br/sobecc/article/view/123/pdf>
9. Battié RN, Rall H, Khorsand L, Hill J. Addressing perioperative staff member fatigue. *AORN J* [Internet]. 2017 [cited 2018 Sep 20];105(3):285-91. DOI: 10.1016/j.aorn.2017.01.003
10. Machado RR, Gelbcke FL. Que brumas impedem a visibilização do centro de material e esterilização? *Texto Contexto Enferm* [Internet]. 2009 [cited 2018 Aug 25];18(2):347-54. DOI: <http://dx.doi.org/10.1590/S0104-07072009000200019>. Available from: <http://www.scielo.br/pdf/tce/v18n2/19.pdf>
11. Mari JJ, Williams P. A validity study of a psychiatric screening questionnaire (SRQ-20) in primary care in the city of Sao Paulo. *Br J Psychiatry* [Internet]. 1986 jan [cited 2018 Sep 15];48:23-6. DOI: <https://doi.org/10.1192/bjp.148.1.23>
12. Magnago TSBS, Prochnow A, Urbanetto JDS, Bitencourt P, Beltrame M, Luz EMF. Relação entre capacidade para o trabalho na enfermagem e distúrbios psíquicos menores. *Texto Contexto Enferm* [Internet]. 2015 [cited 2018 Sep 15];24(2):362-70. DOI: <http://dx.doi.org/10.1590/0104-07072015002580013>. Available from: http://www.scielo.br/pdf/tce/v24n2/pt_0104-0707-tce-24-02-00362.pdf
13. Rodrigues EP, Rodrigues US, Oliveira LMM, Laudano RCS, Nascimento Sobrinho CL. Prevalence of common mental disorders in nursing workers at a hospital of Bahia. *Rev Bras Enferm* [Internet]. 2014 [cited 2018 Sep 15];67(2):296-301. DOI: <https://doi.org/10.5935/0034-7167.20140040>. Available from: <http://www.scielo.br/pdf/reben/v67n2/0034-7167-reben-67-02-0296.pdf>
14. Mattos AIS, Araújo TM, Almeida MMG. Interaction between demand-control and social support in the occurrence of common mental disorders. *Rev Saúde Pública* [Internet]. 2017 [cited 2018 Sep 15];51:48. DOI: <https://doi.org/10.1590/s1518-8787.2017051006446>. Available from: http://www.scielo.br/pdf/rsp/v51/pt_0034-8910-rsp-S1518-87872017051006446.pdf
15. Theorell T, Karasek RA. Current issues relating to psychosocial job strain and cardiovascular disease research. *J Occup Health Psychol* [Internet]. 1996 Jan [cited 2018 Sep 20];1(1):9-26. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/?term=Current+issues+relating+to+psychosocial+job+strain+and+cardiovascular+disease+research>
16. Alves MGD, Chor D, Faerstein E, Lopes CDS, Werneck GL. Short version of the "job stress scale": a Portuguese-language adaptation. *Rev Saúde Pública* [Internet]. 2004 [cited 2018 Sep 18];38(2):164-71. DOI: <https://doi.org/10.1590/S0034-89102004000200003>. Available from: <http://www.scielo.br/pdf/rsp/v38n2/19774.pdf>
17. Araújo TM, Mattos AIS, Almeida MMG, Santos KOB. Aspectos psicossociais do trabalho e transtornos mentais comuns entre trabalhadores da saúde: contribuições da análise de modelos combinados. *Rev Bras Epidemiol* [Internet]. 2016 [cited 2018 Sep 20];19(3):645-57. DOI: <https://doi.org/10.1590/1980-5497201600030014>. Available from: https://www.scielosp.org/article/ssm/content/raw/?resource_ssm_path=/media/assets/rbepid/v19n3/1980-5497-rbepid-19-03-00645.pdf
18. Rotenberg L, Costa AS, Griep RH. Mental health and poor recovery in female nursing workers: a contribution to the study of gender inequities. *Rev Panam Salud Publica* [Internet]. 2014 [cited 2018 Sep 25];35(3):179-85. Available from: <https://scielosp.org/pdf/rpsp/2014.v35n3/179-185>
19. Pai DD, Lautert L, Souza SBC, Marziale MHP, Tavares JP. Violence, burnout and minor psychiatric disorders in hospital work. *Rev Esc Enferm USP*. [Internet]. 2015 [cited 2018 Sep 25];49(3):457-64. DOI: <https://doi.org/10.1590/S0080-623420150000300014>. Available from: <http://www.scielo.br/pdf/reeusp/v49n3/0080-6234-reeusp-49-03-0460.pdf>
20. Lage CEB, Alves MS. (Des)Valorização da enfermagem: implicações no cotidiano do enfermeiro. *Enferm Foco* [Internet]. 2016 [cited 2018 Sep 25];7(3/4):12-6. DOI: <https://doi.org/10.21675/2357-707X.2016.v7.n3/4.908>. Available from: <http://search.ebscohost.com/login.aspx?direct=true&site=eds-live&db=a9h&AN=121292827>
21. Rosado IVM, Russo GHA, Maia EMC. Produzir saúde suscita adoecimento? As contradições do trabalho em hospitais públicos de urgência e emergência. *Ciênc Saúde Colet* [Online]. 2015 [cited 2018 Sep 25];20(10):3021-32. DOI: <https://doi.org/10.1590/1413-812320152010.13202014>. Available from: <http://www.scielo.br/pdf/csc/v20n10/1413-8123-csc-20-10-3021.pdf>

22. Ng LP, Chen IC, Ng HF, Lin BY, Kuar LS. Influence of job demands and job control on work-life balance among Taiwanese nurses. *J Nurs Manag* [Internet]. 2017 Sep [cited 2018 Sep 27];25(6):438-48. DOI: <https://doi.org/10.1111/jonm.12482>. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/28419626>
23. Zurlo MC, Vallone F, Smith AP. Effects of individual differences and job characteristics on the psychological health of Italian nurses. *Eur J Psychol* [Internet]. 2018 [cited 2018 Sep 27];14(1):159-75. DOI: <https://doi.org/10.5964/ejop.v14i1.1478>. Available from: <https://ejop.psychopen.eu/article/view/1478/pdf>
24. Adriaenssens J, Hamelink A, Bogaert PV. Predictors of occupational stress and well-being in First-Line Nurse Managers: A cross-sectional survey study. *Int J Nurs Stud* [Internet]. 2017 May [cited 2018 Sep 27];73:85-92. DOI: <https://doi.org/10.1016/j.ijnurstu.2017.05.007>
25. Santos RR, Greco PBT, Prestes FC, Kirchhof RS, Magnago TSBS, Oliveira MA. Sintomas de distúrbios psíquicos menores em estudantes de enfermagem. *Rev baiana enferm* [Internet]. 2016 [cited 2018 Sep 25];30(3):1-14. DOI: <https://doi.org/10.18471/rbe.v30i3.16060>. Available from: https://portalseer.ufba.br/index.php/enfermagem/article/view/16060/pdf_66

Received: September 30, 2018

Approved: July 30, 2019

Published: November 13, 2019



The *Revista Baiana de Enfermagem* use the Creative Commons license – Attribution -NonComercial 4.0 International. <https://creativecommons.org/licenses/by-nc/4.0/>

This article is an Open Access distributed under the terms of the Creative Commons (CC BY-NC). This license lets others remix, adapt and create upon your work to non-commercial use, and although new works must give its due credit and can not be for comercial purposes, the users do not have to license such derivative works under the same terms.