Prevalence of anxiety disorders as a cause of workers' absence

Prevalência dos transtornos de ansiedade como causa de afastamento de trabalhadores

Prevalencia de los trastornos de ansiedad como causa de absentismo de trabajadores

Márcia Astrês Fernandes[I], Hellany Karolliny Pinho Ribeiro[I], José Diego Marques Santos[I],
Claudete Ferreira de Souza Monteiro[I], Rosana dos Santos Costa[I], Ricardo Felipe Silva Soares[I]

[I] Universidade Federal do Piauí. Terezina, Piauí, Brazil.

ABSTRACT

Objective: to analyze the prevalence of various anxiety disorders among mental and behavioral disorders as a cause for the leave of absence of workers in the state of Piauí. **Method:** transversal census-based study performed with data from the National Social Security Institute. Four-hundred twelve leaves of absence of workers due to anxiety disorders in the 2015-2016 biennium were included. **Results:** higher prevalence was found for mixed anxiety-depressed disorder (31.2%), followed by other anxious disorders (20.6%) and generalized anxiety (14.1%). Ages from 22 to 45 years old prevailed in the group of individuals with duration of absence greater than or equal to 41 days, with statistically significant difference (p < 0.001). There was no statistically significant association (p = 0.004) between rural activity and increased time of absence. **Conclusion:** the study draws attention to the prevalence of "other anxiety disorders" as the cause of leave of absence, with emphasis on mixed anxiety-depressed disorder. **Descriptors**: Anxiety; Absenteeism; Social Security; Occupational Health; Mental Health.

RESUMO

Objetivo: analisar a prevalência dos diversos transtornos de ansiedade entre os transtornos mentais e comportamentais como causa do afastamento laboral de trabalhadores do estado do Piauí. **Método**: estudo transversal e censitário realizado com dados do Instituto Nacional do Seguro Social. Incluíram-se 412 afastamentos de trabalhadores por transtornos de ansiedade no biênio 2015-2016. **Resultados**: verificou-se maior prevalência para o transtorno misto ansioso e depressivo (31,2%), seguido de outros transtornos ansiosos (20,6%) e ansiedade generalizada (14,1%). Prevaleceu a faixa etária de 22 a 45 anos no grupo de indivíduos com duração de afastamento maior ou igual a 41 dias, com diferença estatisticamente significativa (p < 0,001). Houve associação estatisticamente significativa (p = 0,004) entre atividade rural e maior tempo de afastamento. **Conclusão**: o estudo chama atenção para a prevalência de "outros transtornos ansiosos" como causa do afastamento laboral, com destaque para o transtorno misto ansioso depressivo. **Descritores**: Ansiedade; Absenteísmo; Previdência Social; Saúde do Trabalhador; Saúde Mental.

RESUMEN

Objetivo: analizar la prevalencia de los diversos trastornos de ansiedad entre los trastornos mentales y comportamentales como causa del absentismo laboral de trabajadores del estado de Piauí. **Método:** estudio transversal y censal realizado con datos del Instituto Nacional del Seguro Social de Brasil. Se incluyeron 412 absentismos de trabajadores por trastornos de ansiedad en el bienio 2015-2016. **Resultados:** se verificó mayor prevalencia para el trastorno mixto ansioso y depresivo (31,2%), seguido de otros trastornos ansiosos (20,6%) y ansiedad generalizada (14,1%). En el grupo de individuos con una duración de absentismo mayor o igual a 41 días, con una diferencia estadísticamente significativa (p < 0,001), prevaleció el grupo de edad de 22 a 45 años. Se observó una asociación estadísticamente significativa (p = 0,004) entre actividad rural y mayor tiempo de absentismo. **Conclusión:** el estudio llama la atención sobre la prevalencia de "otros trastornos ansiosos" como causa del absentismo laboral, con destaque para el trastorno mixto ansioso-depresivo. **Descriptores:** Ansiedad; Absentismo; Seguridad Social; Salud Laboral; Salud Mental.

CORRESPONDING AUTHOR   Márcia Astrês Fernandes   E-mail: m.astres@ufpi.edu.br

INTRODUCTION

Data from the World Health Organization (WHO) indicate that the prevalence of anxiety disorders (AD) in the world is 3.6%. In the American continent, this mental disorders reaches higher proportions and affects 5.6% of the population, with emphasis on Brazil where AD is present in 9.3% of the population, corresponding to the highest number of anxiety cases in the world[1].

These statistics are reflections of the dynamics of modern society that contributes to the emergence of mental and behavioral disorders, especially anxiety, stress and depression, which have become very common diseases in doctors' offices. They can be a result of exposure to risk factors arising from the work activity and also from the relations built in the workplace[2].

Competitiveness in the labor market coupled with the fear of unemployment induces people to subject themselves to inhumane working conditions. For example, exposure to low wages, unhealthy environments, excessive noises and heat, accumulation of functions, work shifts that exceed the amount of hours bearable and constantly changing shifts; all of these factors favor the onset of diseases in workers[3].

Anxiety is a feeling of vague and unpleasant fear that manifests itself as discomfort or stress due to the anticipation of danger, of something unknown[4], while ADs share traits of excessive fear and anxiety, in addition to behavioral disorders. These disorders differ in relation to the objects or situations that induce fear, anxiety or avoidance behavior and associated cognitive ideation. Thus, they differ from anxiety because they are more intense and persist beyond the appropriate periods for normal development[5].

ADs are frequent problems when it comes to the health of workers, as they generate high costs and impact the rates of absenteeism, presenteeism and other aspects related to work, such as reductions in productivity and performance. In France, a population-based study with 4,717 workers showed that high psychological demand, too few rewards, emotional demands and insecurity are predictors of anxiety[6].

In Brazil, mental and behavioral disorders are responsible for the overall growth in the granting of benefits, for both accident at work pay and statutory sick pay. From 2004 to 2013, the number of leaves granted due to this kind of illness increased from 615 to 12,818. In total, there was an increase in the order of 1,964% for this type of concession[7].

Brazilian studies suggest ADs as a major cause of absences from work among mental and behavioral disorders. This is worrisome if we consider the statistics identified in recent researches, which indicate an increase in the number of absences due to anxiety disorders. In this way, new investigations should be conducted so a better understanding of AD may be obtained, unveiling the reality of the onset of this disease[8-9].

In this sense, nursing advances in the understanding of the work of professionals who suffer from ADs; in the prevention of diseases, providing access to quality care and managing environments; and in interventions that propose improvements to the working conditions and quality of life of workers[10], seeing as their bio-psychic well-being is considered as a factor which heavily impacts the work activities performed[11].

OBJECTIVE

To analyze the prevalence of various anxiety disorders among mental and behavioral disorders as cause for the leave of absence of workers in the state of Piauí.

METHOD

Ethical aspects

The research was developed according to the ethical principles for research involving human beings laid out in resolution No. 466/12 of the National Health Council, being submitted and approved by the Research Ethics Committee of Universidade Federal do Piauí.

Design, study site and period

This is a cross-sectional study, developed at the headquarters of the National Social Security Institute (INSS) of the city of Teresina, Piauí, Brazil. Data were collected between June and July 2017.

Population: inclusion and exclusion criteria

Census was used as the means to obtain the study population, all the records of the workers having been obtained in the Unified Benefits System (SUB) from INSS, including sick pay and disability retirement due to anxiety disorders (AD) in the 2015-2016 biennium. A total of 1,165 absences due to mental and behavioral disorders were identified in 2015, and 1,612 in 2016.

The inclusion criteria were: absence of workers under the legal framework of the Consolidation of Labor Laws (CLT), who were over 18 years old, with AD diagnosis as cause of absence. The exclusion criteria consisted of absences with incomplete information. After application of the exclusion criteria, the sample was reduced to 412 absence records. It was not possible to identify which workers were granted sick leave more than once because of the limitations in the database, thus, the 412 records relate to the absences, which does not necessarily imply in 412 workers.

Study protocol

The data were collected through a specific instrument for this study, using variables present in the SUB: sex, date of birth, age, income, city of origin, branch of activity, time of absence, year it was granted and causes of absence according to the International Statistical Classification of Diseases and Related Health Problems (ICD-10). Chapter V of this classification published by WHO corresponds to mental and behavioral disorders and serves mainly to standardize useful diagnostic classifications for professionals working in mental health[12].

Analysis of results and statistics

The data were entered and stored in a spreadsheet (Excel – Microsoft Office 2013) and analyzed using the Statistical Package for the Social Sciences (SPSS 20.0) and BioEstat 5.0. To describe the data collected, the absolute frequencies and percentages were calculated.

To verify the difference between the frequencies of a same variable's categories, Chi-Square Goodness of Fit test was used for the expected proportions. Chi-Square Independence test was used to verify the association between time of absence and the variables related to social security and socio-demographic characteristics. When their assumptions were violated (cells with value lower than five), G-test of independence was used. For all tests, p < 0.05 was considered as significant. For bivariate analysis, the income variable was once again categorized: between one and two and more than two minimum wages.

For analysis of duration of the sick leaves, a study in which the average duration of absence of workers due to AD was 41.40 days was used as reference[13]. Thus, to verify the association between variables related to social security and socio-demographic characteristics, a time of absence lower than 41 days and corresponding to 41 days or more was adopted.

RESULTS

Most of the workers were female (56.1%), aged between 30 and 40 years old (37.4%), with income between one and two minimum wages (77.4%) and from Teresina (52.2%), carrying out industrial work activities in an urban environment (86.4%). There was no statistically significant difference in the frequency of categories in all mentioned variables (Table 1).

In relation to the profile of the absences (Table 2), 2016 accounted for the highest number of occurrences compared to 2015 (61.1% versus 39.8%) and statutory sick pay was the benefit which was most often granted (76.7%). In relation to cause, higher prevalence for mixed anxiety-depressed disorder (31.2%), followed by other anxiety disorders (20.6%), generalized anxiety (14.1%) and panic disorder (11.6%) was found. In relation to the time of absence, the majority lasted from 31 to 60 days. There was no statistically significant difference in the frequency of categories in all mentioned variables.

The bivariate analysis for time of absence (< 41 or ≥ 41 days) with variables related to social security and socio-demographic characteristics (Table 3) demonstrated a prevalence of the age group between 22 and 45 years old in both groups; however, a higher proportion of individuals older than 45 years old was noted in the group with time of absence greater than 41 days (19.1% versus 31.8%), with statistically significant difference (p < 0.001). Although the urban sector was prevalent in both groups, it was less frequent in the group with time of absence greater than 41 days (96.8% versus 85.2%), showing statistically significant association (p = 0.004) between rural activity and greater time of absence. Sex (p = 0.762), income (p = 0.199), type of sick pay (p = 0.205) and type of disorder (p = 0.071) did not reveal statistically significant association with a time of absence greater than or equal to 41 days.

Table 1 – Demographic and occupational profile of workers who were granted sick leave due to an anxiety disorder, Teresina, Piauí, Brazil, 2017

Variable	Category	n	(%)	p value
Sex	Male	181	43.9	0.014*
	Female	231	56.1	
	Total	412	100	
Age group (years)	18 to 24	29	7.0	< 0.001*
	25 to 29	52	12.6	
	30 to 40	154	37.4	
	41 to 50	93	22.6	
	51 to 60	72	17.5	
	More than 60	12	2.9	
	Total	412	100	
Income (minimum wages)	1 to 2	319	77.4	< 0.001*
	2 to 3	44	10.7	
	3 to 4	25	6.1	
	4 to 5	14	3.4	
	5 or more	10	2.4	
	Total	412	100	
Municipality of origin	Teresina	215	52.2	< 0.001*
	Other municipalities of Piauí*	178	43.2	
	Municipalities in other states	19	4.6	
	Total	412	100	
Sector	Urban	357	86.4	< 0.001*
	Rural	55	13.4	
	Total	412	100	

Note: *statistically significant p value (Chi-Square Goodness of Fit test for expected equal proportions). *Other municipalities of Piauí, where absences due to AD occurred in the studied period: Floriano, Parnaíba, Piripiri, Picos, among others.

Table 2 – Profile of absences from work due to anxiety disorder, Teresina, Piauí, Brazil, 2017

Variable	Category	n	(%)	p value
Year in which the absence occurred	2015	164	39.8	< 0.001*
	2016	248	60.2	
	Total	412	100	
Type of absence	Statutory sick pay	316	76.7	< 0.001*
	Accident at work sick pay	77	18.7	
	Disability retirement for work-related injury	3	0.7	
	Statutory disability retirement	16	3.9	
	Total	412	100	
Cause of absence	Mixed anxiety-depressed disorder	128	31.2	
	Other anxiety disorders	85	20.6	< 0.001*
	Generalized anxiety	58	14.1	
	Panic disorder	48	11.6	
	Reaction to severe stress and adjustment disorders	17	4.1	
	Acute reaction to stress	16	3.9	
	Post-traumatic stress	15	3.6	
	Adjustment disorder	12	2.9	
	Obsessive-compulsive disorder	6	1.5	
	Others**	27	6.5	
	Total	412	100	
Time of absence (days)***	Up to 30	39	9.9	< 0.001*
	31 to 60	95	24.2	
	61 to 90	94	23.9	
	91 to 120	70	17.8	
	121 to 180	51	12.9	
	More than 180	44	11.3	
	Total	393	100	

Note: *statistically significant p value (Chi-Square Goodness of Fit test for expected equal proportions). **The category "other" includes disorders n < 6: phobic anxiety disorders; agoraphobia; social phobias; other mixed anxiety disorders; non-specified anxiety disorder; obsessive-compulsive disorder with predominance of obsessive ideas or ruminations; obsessive-compulsive disorder with predominance of compulsive behaviors (obsessive rituals); obsessive-compulsive disorder, mixed form, with obsessive ideas and compulsive behaviors; non-specified obsessive-compulsive disorder; other reactions to severe stress; dissociative movement disorders; dissociative convulsions; somatoform disorders; non-specified neurotic disorder. ***Workers absent due to retirement having been excluded.

Table 3 – Comparison of time of absence with variables related to social security, socio-demographic characteristics and type of anxiety disorder, Teresina, Piauí, Brazil, 2017

Variable	Category	Time of absence (days)				p value
		< 41		≥ 41		
		n	%	n	%	
Sex	Male	26	41.3	143	43.3	0.762
	Female	37	58.7	187	56.7	
	Total	63	100	330	100	
Age (years)	18 to 21	2	3.2	6	1.8	< 0.001*
	22 to 45	49	77.8	222	67.3	
	46 to 60	11	17.5	92	27.9	
	More than 60	1	1.6	10	3.0	
	Total	63	100	330	100	
Income (minimum wages)	1 to 2	45	71.4	260	78.8	0.199
	More than 2	18	28.6	70	21.2	
	Total	63	100	330	100	
Sector	Urban	61	96.8	281	85.2	0.004*
	Rural	2	3.2	49	14.8	
	Total	63	100	330	100	
Type of sick pay	Statutory	47	74.6	269	81.5	0.205
	Accident at work	16	25.4	61	18.5	
	Total	63	100	330	100	

Table 3 (concluded)

Variable	Category	Time of absence (days)				p value
		< 41		≥ 41		
		n	%	n	%	
Disorder which motivated the absence	Panic disorder	9	14.3	38	11.5	0.071
	Generalized anxiety	6	9.5	52	15.8	
	Mixed anxiety-depressed disorder	13	20.6	107	32.4	
	Other	35	55.6	133	40.3	
	Total	63	100	330	100	

Note: (*) statistically significant value.

DISCUSSION

In the general population, ADs have been associated with negative results, such as functional incapacity, risk behavior, substance abuse and dependence, in addition to absences from work. This mental disorder is related to social, family, financial, interpersonal and professional factors[14].

In relation to the association between sex and anxiety, the highest prevalence found in this study was among the female population. This can be explained by a combination of biological, psychosocial and cultural factors, including the multiple roles shared between work and family and gender inequality within and outside the work environment. These factors become more prominent in activities characterized by high emotional demands, low wages, lack of autonomy and lack of support and perspective in one's career[15].

In the general population, an individual is more likely to develop ADs at 21 years of age[16]. In the workers of this research, the development of AD in the 20-year old range may have led to incapacitation for work and absence in older ages – between 30 and 40 years old. Thus, it is possible to see the impact of incapacity for work on Brazilian society, with the high socioeconomic costs that work leaves cause in the country's productive force as it affects, mainly, the active population's age group[17-18].

When dealing with the relationship between age and duration of absences, an investigation which examined short-term absences (less than 70 days) due to multiple causes in 2,601 employees of a French regional bank found results in line with those of this research, indicating age as a factor that contributes to the increase in the time of absence, as well as to the increase in the likelihood of presenteeism in workers. According to estimates, a 25-year old man, in comparison with a 55-year old one, has about three more days of leave of absence[19]. It is also known that ADs, if not properly treated, tend to become chronic over time, becoming more serious and demanding greater durability of the leave of absence[20].

It is important to note that low income is associated with the most common ADs. An European research conducted with 35,634 participants found that the higher the social inequality, the greater the prevalence of AD[21]. The lack of financial resources reflects the general conditions of health and, essentially, of mental health. Thus, low income is related to the high rate of mental disorders that arise as a result of the reduction in power, insecurity and fulfillment of social roles, among other factors[22].

The experience in urban environments is also a potential threat to mental health and well-being. A study conducted in Scotland ratifies this proposition by saying that the urban population has the highest rates of prescriptions of psychotropic medication for anxiety, depression and psychosis[23]. Also, industrial activities developed in urbanized territories have a more articulated organization in society, with a high degree of physical and mental demands[24].

On the other hand, as can be seen in this research, workers in rural environments asked for longer leaves of absence. This finding may be resulted from the uneven distribution of health professionals between urban and rural areas. In this way, due to the lack of professionals, workers from the rural sector have insufficient health coverage for the treatment of anxiety disorders, which leads to a longer duration of absence due to incapacity for work[25].

Thus, "other anxiety disorders", reactions to severe stress and adjustment disorders were prevalent as causes of absence among the ADs, mixed anxiety-depressed disorder having stood out, followed by "other anxiety disorders" and generalized anxiety. Other studies corroborate these results[26-29]. An epidemiological research held in Vitória (ES) in a database of the Occupational Medicine Department revealed mixed anxiety-depressed disorder as prevalent (6.34%) and with the longest average duration (23.6 days) of the period of absence from work out of the causes for sick leave due to anxiety disorders[30].

Another research conducted with institutional documents used to feed the System for Monitoring the Health of Workers in Rio Grande do Sul highlighted ADs as the second highest occurrence (18.18%) among the causes for absence. It also indicated mixed anxiety-depressed disorder, generalized anxiety and "other anxious disorders" as prevalent[31]. In an analysis conducted in São Paulo (SP) with 131 applicants for sick pay due to mental disorders, similar results were obtained regarding the prevalence of these disorders[9].

A study on leaves of absence registered in the Integrated Healthcare Subsystem for the Federal Servers of Rondônia, in addition to ratifying the information above, added, with regard to the number of leaves, that the average days of absence due to AD was 37.4 days (ranging from 1 to 360 days)[32].

It is estimated that about 85% of patients with depression also have significant symptoms of anxiety. Similarly, symptoms of depression occur in up to 90% of patients with anxiety. Among the causes of absence, mixed anxiety-depressed disorder is considered to be the most incapacitating and resistant to treatment, showing higher risk of suicide and being associated with social, physical

and psychological problems, in addition to jeopardizing work performance the most compared to any other isolated condition. The disorder is characterized by symptoms of anxiety and depression, which are severe enough to warrant a psychiatric diagnosis, although none of these symptoms are clearly predominant[33]. Although it is recognized that mixed anxiety-depressed disorder has strong influence on work performance, very few studies have assessed this condition among workers[34].

It is important to emphasize that generalized anxiety disorder, in addition to being highly prevalent and chronic, is costly, being characterized by persistent excessive worry and anxiety, in combination with various psychological and somatic complaints, such as autonomous excitement, agitation, fatigue, concentration problems, irritability and sleep issues[35].

Emphasis should also be given to panic disorder, characterized by sudden and recurrent anxiety attacks that result in fear or concern that these attacks happen again or otherwise negatively impact life in general. DAs are considered milder and less incapacitating psychiatric disorders when compared to psychotic or mood disorders, as patients do not lose their sense of reality. However, they are associated with significant impairment in functional and social performance, like other psychiatric disorders, such as schizophrenia, major depressive disorder and dementia. Thus, panic disorder contributes independently to the reduction of health-related quality of life and to the longer duration of absences from work[36].

Although national and international studies have investigated the topic, for the local reality, this research was innovative, original and necessary, considering the lack of investigations on the subject in Piauí. Also considering the issue of high suicide rates in the state, the importance of this work is highlighted, as it correlates them with the presence of mental disorders, including ADs. Furthermore, absences due to AD have economic and social implications which increase the need for effective measures to alleviate their consequences and reduce their onset. It should be noted that the working days lost involve a series of costs, such as expenses with hiring replacements and granting benefits, reduced productivity, increased health costs and decrease in the quality of life of workers and of the services provided.

Study limitations

The results should be interpreted considering their limitations, which comprise the study site, restricted to one region of Brazil; the reduced number of variables provided by the Unified Benefits System, in particular, the absence of information on the most affected occupational categories; and the impossibility of generalization of the results, since the research was developed with data from only one state in the country.

Contributions to the field of nursing, health or public policy

The debate about leaves of absence contributes to further discussions on the subject, providing new knowledge to aid the implementation of actions focused on the mental health of workers through strategies that allow the prevention of the onset of illnesses resulted from mental and behavioral disorders, such as anxiety disorders, to promote mental health in the workplace. Thus, the study, in addition to being relevant to public health, contributes to the field of nursing, especially in the area of mental and occupational health, considering the need for research and intervention in the workplace with regard to the organization of work and its role in the promotion of mental health, as it may subsidize the adoption of preventive strategies aimed at the mental health of workers.

CONCLUSION

The year 2016 accounted for the highest number of absences due to anxiety disorders, and statutory sick pay was the type of benefit most often granted to workers. By observing the causes of the absences, prevalence of mixed anxiety-depressed disorder was noted, followed by generalized anxiety, panic disorder and "other anxiety disorders". In relation to the time of absence, the majority lasted from 31 to 60 days.

Ages from 22 to 45 years old prevailed in the group of individuals with duration of absence greater than or equal to 41 days, with statistically significant difference (p < 0.001). There was no statistically significant association (p = 0.004) between rural activity and increased time of absence. The study offers, without a doubt, contributions to the scientific community. The realization of new, more robust researches with greater geographical coverage are thus encouraged.

REFERENCES

1. Organização Mundial de Saúde-OMS. Depression and other common mental disorders: global health estimates[Internet]. Geneva: WHO; 2017[cited 2017 Nov 04]. Available from: http://apps.who.int/iris/bitstream/10665/254610/1/WHO-MSD-MER-2017.2-eng.pdf

2. Moraes MCF, Silva NB. Saúde mental e as relações de trabalho: como a ansiedade influencia o comportamento humano no ambiente de trabalho. Interfaces Saberes[Internet]. 2015[cited 2017 Nov 04];14(1):1-16. Available from: https://interfacesdesaberes.fafica-pe.edu.br/index.php/import1/article/view/533/274

3. Carreiro GSP, Ferreira Filha MO, Lazarte R, Silva AO, Dias MD. Processo de adoecimento mental do trabalhador da Estratégia Saúde da Família. Rev Eletron Enferm[Internet]. 2013[cited 2017 Nov 04];15 (1):146-55. Available from: https://revistas.ufg.br/fen/article/view/14084/15532

4. Guimarães AMV, Silva Neto AC, Vilar ATS, Almeida BGC, Albuquerque CMF, Fermoseli AFO. Transtornos de ansiedade: um estudo de prevalência sobre as fobias específicas e a importância da ajuda psicológica. Semina[Internet]. 2015[cited 2018 Jan 11];3(1):115-28. Available from: https://periodicos.set.edu.br/index.php/fitsbiosaude/article/view/2611/1497

5. Associação Americana de Psiquiatria-APA. Manual diagnóstico e estatístico de transtornos mentais– DSM-5[Internet]. 5ªed. Porto

Alegre: Artmed; 2014[cited 2018 Jan 11]. Available from: http://aempreendedora.com.br/wp-content/uploads/2017/04/Manual-Diagn%C3%B3stico-e Estat%C3%ADstico-de-Transtornos-Mentais-DSM-5.pdf

6. Niedhammer I, Malard L, Chastang J. Occupational factors and subsequent major depressive and generalized anxiety disorders in the prospective French national SIP study. BMC Public Health[Internet]. 2015[cited 2017 Nov 04];15(200):1-11. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4380116/pdf/12889_2015_Article_1559.pdf

7. Brasil. Secretaria de Políticas de Previdência Social. 2º Boletim Quadrimestral de Monitoramento dos Benefícios[Internet]. Brasília: Secretaria de Políticas de Previdência Social. 2014[cited 2017 Nov 04]. Available from: http://www.previdencia.gov.br/wp-content/uploads/2015/01/2%C2%BA-boletim-quadrimestral.pdf

8. Silva-Jr JS, Fischer FM. Disability due to mental illness: social security benefits in Brazil 2008-2011. Rev Saúde Pública[Internet]. 2014[cited 2017 Sep 02];48(1):186-90. Available from: http://www.scielo.br/pdf/rsp/v48n1/en_0034-8910-rsp-48-01-0186.pdf

9. Silva-Jr JS, Fischer FM. Sickness absence due to mental disorders and psychosocial stressors at work. Rev Bras Epidemiol[Internet]. 2015[cited 2017 Nov 04];18(4):735-44. Available from: http://www.scielo.br/pdf/rbepid/v18n4/en_1980-5497-rbepid-18-04-00735.pdf

10. Barros VG, Gallasch CH, Remijo KP, Lima KLJ, Baptista PCP, Felli VEA. Saúde do trabalhador de enfermagem: resgate da produção científica. Cogitare Enferm[Internet]. 2017[cited 2018 Mar 07];3 (22):e49475. Available from: http://revistas.ufpr.br/cogitare/article/view/49475/pdf

11. Silva FJ, Ratier APP, Felli VEA, Tito RS, Baptista PCP. A formação de pesquisadores na temática da saúde do trabalhador de enfermagem. Enferm Foco[Internet]. 2017[cited 2018 Mar 07];8(3):40-4. Available from: http://revista.cofen.gov.br/index.php/enfermagem/article/download/1322/397

12. Organização Mundial da Saúde-OMS. Classificação de transtornos mentais e de comportamento da CID10: diretrizes diagnósticas e de tratamento para transtornos mentais em cuidados primários. Porto Alegre: Artes Médicas; 1998.

13. Oliveira LA, Baldaçara LR, Maia MZB. Afastamentos por transtornos mentais entre servidores públicos federais no Tocantins. Rev Bras Saúde Ocup[Internet]. 2015[cited 2017 Nov 04]40(132):156-69. Available from: http://www.scielo.br/pdf/rbso/v40n132/0303-7657-rbso-40-132-156.pdf

14. Pereira-Lima K, Loureiro SR, Crippa JA. Mental health in medical residents: relationship with personal, work-related, and sociodemographic variables. Rev Bras Psiquiatr[Internet]. 2016[cited 2017 Nov 04];38:318–24. Available from: http://www.scielo.br/pdf/rbp/v38n4/1516-4446-rbp-1516444620151882.pdf

15. Granado AE. Crisis económica, políticas, desempleo y salud (mental). Rev Asoc Esp Neuropsiq[Internet]. 2014[cited 2017 Nov 04];34(122). Available from: http://scielo.isciii.es/pdf/neuropsiq/v34n122/10debate01.pdf

16. Jones PB. Adult mental health disorders and their age at onset. BJPsych Int[Internet]. 2013[cited 2017 Sep 02];202(Ns54):s5-10. Available from: http://bjp.rcpsych.org/content/202/s54/s5

17. Leão ALM, Barbosa-Branco A, Rassi Neto E, Ribeiro CAN, Turchi MD. Sickness absence in a municipal public service of Goiânia, Brazil. Rev Bras Epidemiol[Internet]. 2015[cited 2017 Nov 04];18(1):262-77. Available from: http://www.scielo.br/pdf/rbepid/v18n1/1415-790X-rbepid-18-01-00262.pdf

18. Gómez GFV, Llanos RA. Factores psicosociales de origen laboral, estrés y morbilidad em el mundo. Psicol Caribe[Internet]. 2014[cited 2017 Nov 04;]31(2):354-85. Available from: http://www.redalyc.org/articulo.oa?id=21331836004

19. Bierla I, Huver B, Richard S. New evidence on absenteeism and presenteeism. Int J Hum Resour Man[Internet]. 2013[cited 2017 Nov 02];24(7):1536–50. Available from: http://www.tandfonline.com/doi/abs/10.1080/09585192.2012.722120

20. Batelaan NM, Rhebergen D, Spinhoven P, Van Balkom AJ, Penninx BW. Two-year course trajectories of anxiety disorders: Do DSM classifications matter? J Clin Psychiatry[Internet]. 2014[cited 2017 Nov 02];75(9):985-93. Available from: http://www.psychiatrist.com/JCP/article/Pages/2014/v75n09/v75n0918.aspx

21. Layate R, Whelan CT. Who feels inferior? a test of the status anxiety hypothesis of social inequalities in health. Eur Sociol Rev[Internet]. 2014[cited 2017 Nov 04];30(4):525–35. Available from: https://academic.oup.com/esr/article/30/4/525/2763459

22. Lucchese R, Sousa K, Bonfin SP, Vera I, Santana FR. Prevalence of common mental disorders in primary health care. Acta Paul Enferm[Internet]. 2014[cited 2017 Nov 04];27(3):200-7. Available from: http://www.scielo.br/pdf/ape/v27n3/1982-0194-ape-027-003-0200.pdf

23. McKenzie K, Murray A, Booth T. Do urban environments increase the risk of anxiety, depression and psychosis? an epidemiological study. J Affect Disord[Internet]. 2013[cited 2017 Nov 04];4(2):1019–24. Available from: https://www.ncbi.nlm.nih.gov/pubmed/3987222

24. Souza HM, Ney MG, Souza PM, Ney VSP. Escolaridade, carteira de trabalho e renda dos empregados no meio rural brasileiro. Rev Geograf Agrár[Internet]. 2015[cited 2017 Nov 04];10(20):468-92. Available from: http://www.seer.ufu.br/index.php/campoterritorio/article/view/27044/17032

25. Morell AL, Kiem S, Millsteed MA, Pollice A. Attraction, recruitment and distribution of health professionals in rural and remote Australia: early results of the Rural Health Professionals Program. Hum Resour Health[Internet]. 2014[cited 2017 Nov 04];12(15):1-6.Available from: https://human-resources-health.biomedcentral.com/articles/10.1186/1478-4491-12-15

26. Vale SF, Maciel RH, Nascimento APT, Vasconcelos JWO, Pimentel FHP. Análise de diagnósticos associados às licenças médicas de servidores públicos do Ceará. Rev Psicol[Internet]. 2015[cited 2017 Nov 04];6(1):68-81. Available from: http://www.periodicos.

ufc.br/psicologiaufc/article/view/1694

27. Oliveira RD, Neves EB, Kaio CH, Ulbrich L. Afastamento do trabalho em profissionais de enfermagem por etiologias psicológicas. Rev Bras Promoc Saúde[Internet]. 2013[cited 2017 Nov 04];26(4):554-62. Available from: http://periodicos.unifor.br/RBPS/article/view/2337

28. Marangoni VSL, Neves ALM, Souza Filho ZA, Martins GC. Afastamento laboral por transtornos mentais entre os servidores da prefeitura municipal de Manaus: uma análise preliminar. Semina [Internet]. 2016[cited 2017 Nov 04];37(2):13-24. Available from: http://www.uel.br/revistas/uel/index.php/seminabio/article/view/26737

29. Zambaldi CF, Carrera A, Montanha LCP. Relação dos transtornos psiquiátricos com o absenteísmo dos servidores públicos federais. COGNITIO[Internet]. 2013[cited 2017 Nov 04];1(3):1-8. Available from: http://revista.unilins.edu.br/index.php/cognitio/article/view/107

30. Bastos VG, Saraiva PGC, Saraiva FP. Absenteísmo-doença no serviço público municipal da Prefeitura Municipal de Vitória. Rev Bras Med Trab[Internet]. 2016[cited 2017 Nov 04];14(3):192-201. Available from: dx.doi.org/10.5327/Z1679-443520164615

31. Santana LL, Sarquis LMM, Brey C, Miranda FMD, Felli VEA. Absenteeism due to mental disorders in health professionals at a hospital in southern Brazil. Rev Gaúcha Enferm[Internet]. 2016[cited 2017 Nov 04];37(1):e53485. Available from: http://www.scielo.br/pdf/rgenf/v37n1/en_0102-6933-rgenf-1983-144720160153485.pdf

32. Schlindwein VLDC, Morais PR. Prevalência de transtornos mentais e comportamentais nas instituições públicas federais de Rondônia. Cad Psicol Soc Trab[Internet]. 2014[cited 2017 Nov 04];17(1):117-27. Available from: https://www.revistas.usp.br/cpst/article/download/112336/110300

33. Möller H, Bandelow B, Volz HP, Barnikol UB, Seifritz E, Kasper S. The relevance of 'mixed anxiety and depression' as a diagnostic category in clinical practice. Eur Arch Psychiatry Clin Neurosci[Internet]. 2016[cited 2017 Nov 04];266(8):725–36. Available from: https://link.springer.com/article/10.1007%2Fs00406-016-0684-7

34. Bjørngaard JH, Bjerkeset O, Vaag J, Ose SO. Anxiety and depression and work participation in 9300 Norwegian auxiliary nurses. Scandin J Organ Psychol[Internet]. 2015[cited 2017 Nov 04];7(1):33-42. Available from: https://www.sintef.no/en/publication/?pubid=CRIStin+1312473

35. Borza L. Cognitive-behavioral therapy for generalized anxiety. Dialog Clin Neurosci[Internet]. 2017[cited 2017 Nov 04];19(2):203-7. Available from: https://www.jad-journal.com/article/S0165-0327(14)00469-8/fulltext

36. Lee Park Y, Kim W, Chae JH, Seo Oh K, Frick KD, Woo JM. Impairment of work productivity in panic disorder patients. J Affect Disord[Internet]. 2014[cited 2017 Nov 04];157:60-5. Available from: https://www.jad-journal.com/article/S0165-0327(13)00861-6/fulltext