

Occupational Medicine and Occupational Stress Prevention

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Abstract

Background: Occupations and jobs have psychological risk factors for mental disorders and diseases. Many of them are preventable. Occupational stresses are one of the preventive occupational risk factors.

Objective: Introduction of job stress and types, diagnosis, treatment and preventive methods.

Materials and Methods: In a review study the author research in related scientific literature, journals, websites about the work stress. Job psychological stress, types, diagnosis, treatment and preventive methods.

Results: Psychological stresses can be classified to duty stresses, role work stresses, work environmental stresses, systematic stresses, job development. But the prevention and treatment are important in the workplaces.

Conclusion: Psychological stresses are important and recognizing the risk factors is necessary. Preventive methods are useful.

Keywords: Occupation, Stress, Prevention

Introduction

Psychological disorders are important in the mental health of people in society. (1,2) The morbidity from psychological disorders is a problem in the workplaces. (3,4) These stresses have many risk factors. In this

article, the author discussed occupational risk factors for occupational psychological disorders and the methods for prevention from their effects. (5-7) There are many psychological risk factors in the occupations and workplaces. (8,9) Psychological disorders can cause mortality or morbidity. (10,11)

Some studies researched about occupational and none occupational risk factors of stresses. (12) Occupational health systems must be prevented from risk factors effects. (13, 14) Occupational stresses are preventable and must be treat by psychological and none psychological effects. (15-17) many of occupational risk factors are from systematic work station and organization. (18-21)

Methods

In a review, article author searched in search about work stress in motors such as Pub med, Scopus, Google scholar, world health organization (WHO), international labor organization (ILO), occupational safety and health administration (OSHA), national institute for occupational safety and health (NIOSH), in literature and occupational and psychiatrics medicine.

Results

Psychological stresses can be classified to duty stresses, role work stresses, work environmental stresses, systematic stresses, job development. But the prevention and treatment are important in the workplaces. (1)

Job stress must be diagnosed early, in the occupational examinations. Screening is important in this situation. Treatment must be done early and preventive methods should be done for workers.

Discussion

Psychological stresses can be classified to duty stresses, role work stresses, work environmental stresses, systematic stresses, job development.

Duty stresses are from doing of many duties or from a few duties, over load and under load of duties are important. Sometimes duties are qualitative or quantitative overload and some of duties are qualitative or quantitative underload. (1,6)

Duties with human wellbeing responsibilities are stressful for many people. Duties with low decision-making status have occupational stress too.

Role work stresses are job stress in conflicting roles and unclear role of the worker.

Insufficiency of resources from employer and financial, low decision making in role doing is a stressful situation too. (1,6)

work environmental stresses are large group of stress risk factors; physical factors such as noise, chemicals such as metals and metals for example lead, manganese and mercury, other chemicals such as solvents and toxic gases, ergonomics factors for example shiftwork specially night work, fitness for work environment and for devices. Mechanical factors in unsafe work environment. Systematic work stresses have many examples, changing in the work or work environment can

be caused stress in workers and employees. (1) Change must be done slowly and by preparation of workers about that; change in products is one of these stresses. Aims of person should be agreed with the aims in system; before recruitment must be told in interview about that, fights in the workplaces can be caused many problematic situations for workers and employers. job development is one of the stressful items for example unsuccessful on job promotion, duties are unrelated to skills, it is problematic and stressful. (1)

One of the occupational psychological disorders is burn out syndrome. This disorder has some mental and physical symptoms. The people with burn out syndrome have hopelessness from their works. They have avoidance from answering and talking with customers. Loss of idealism is one of the other symptoms in patients. Loss of concentration and memory are related to low quality of sleep in this disorder. (1,7)

For treatment is recommended putting the priorities for daily works and successful percent is calculated at the end of the work day. They should go to the weekend and have some rest. This disorder can be prevented and occupational health center has main role in prevention.

Other occupational psychological disorder is chronic fatigue syndrome. It is caused disability and out of work. But graded activity is the main treatment in new cases.

Other cases need to consultation by psychologist and getting drugs by psychiatrics.

Conclusion

Psychological stresses are important and recognizing the risk factors is necessary. Preventive methods are useful.

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References

1. James P. Seward, Robert C. Larsen, Occupational stress, Ladou J, Current occupational and environmental medicine, Mc Graw Hill,2007;4:579-594
2. Lee JH, Hwang J, Lee KS. Job satisfaction and job-related stress among nurses: The moderating effect of mindfulness. *Work*. 2019;62 (1):87-95. Doi: 10.3233/WOR-182843. PMID: 30741714.
3. Bardhan R, Heaton K, Davis M, Chen P, Dickinson DA, Lungu CT. A Cross Sectional Study Evaluating Psychosocial Job Stress and Health Risk in Emergency Department Nurses. *Int J Environ Res Public Health*. 2019 Sep 4;16(18):3243. Doi: 10.3390/ijerph16183243. PMID: 31487874; PMCID: PMC6765813.
4. Botha E, Gwin T, Purpora C. The effectiveness of mindfulness-based programs in reducing stress experienced by nurses in adult hospital settings: a systematic review of quantitative evidence protocol. *JBI Data base System Rev Implement Rep*. 2015 Oct;13(10):21-9. Doi: 10.11124/ jbisrir-2015-2380. PMID:26571279.
5. Li L, Ai H, Gao L, Zhou H, Liu X, Zhang Z, Sun T, Fan L. Moderating effects of coping on work stress and job performance for nurses in tertiary hospitals: a cross-sectional survey in China. *BMC Health Serv Res*. 2017 Jun 12;17(1):401. Doi: 10.1186/s12913-017-2348-3. PMID: 28606180; PMCID: PMC5469137.
6. Park S, Jang MK. Associations Between Workplace Exercise Interventions and Job Stress Reduction: A Systematic Review. *Workplace Health Saf*. 2019 Dec;67(12):592-601. Doi: 10.1177/2165079919864979. Epub 2019 Aug 24. PMID: 31448704.
7. Lu Y, Hu XM, Huang XL, Zhuang XD, Guo P, Feng LF, Hu W, Chen L, Zou H, Hao YT. The relationship between job satisfaction, work stress, work-family conflict, and turnover intention among physicians in Guangdong, China: a cross-sectional study. *BMJ Open*. 2017 May 12;7(5): e014894. Doi:101136/bmjopen-2016-014894. PMID: 28501813; PMCID: PMC5566636.
8. van der Wal RAB, Wall age J, Bucx MJL. Occupational stress, burnout and personality in anesthesiologists. *Cur Opin, Anaesthesiol*. 2018. Jun;31(3): 351356. Doi: 10.1097/ ACO. 000000000000587. PMID: 29474215.
9. Hassan NM, Abu-Elenin MM, Elsallamy RM, Kabbash IA. Job stress among resident physicians in Tanta University Hospitals, Egypt. *Environ Sci Pollut Res Int*. 2020 Oct;27(30):37557-37564. doi: 10.1007/s11356-020-08271-9. Epub 2020 Mar 10. PMID: 32157529.
10. Basu S, Qayyum H, Mason S. Occupational stress in the ED: a systematic literature review. *Emerg Med J*. 2017 Jul;34(7):441-447. Doi: 10.1136/emered-2016-205827. Epub 2016 Oct 11. PMID: 27729392.
11. Cohidon C, Wild P, Senn N. Job stress among GPs: associations with practice Organisation in 11 high-income countries. *Br J. Gen.Pract.*2020Aug27;70(698): e657e667.Doi: 10.3399/ bjgp 20X710909. PMID: 32661010; PMCID: PMC7363272.
12. Labrague LJ, McEnroe-Petite DM, Leocadio MC, Van Bogaert P, Cummings GG. Stress and ways of coping among nurse managers: An integrative review. *J Clin Nurs*. 2018 Apr;27 (7-8):1346-1359. Doi: 10.1111/ jocn.14165. Epub 2018 Jan 24. PMID: 29148110.
13. Alonso F, Esteban C, Gonzalez-Marin A, Alfaro E, Useche SA. Job stress and emotional exhaustion at work in Spanish workers: Does unhealthy work affect the decision to drive? *PLoS One*. 2020 Jan 13;15(1): e0227328. Doi: 10.1371/journal.pone.0227328. PMID: 31929546; PMCID: PMC6957144.

14. Guo H, Ni C, Liu C, Li J, Liu S. Perceived job stress among community nurses: A multi-center cross-sectional study. *Int J Nurs Pract*. 2019 Feb;25(1):e12703. Doi: 10.1111/ijn.12703. Epub 2018 Oct 24. PMID: 30353616.
15. Chichra A, Abhijnhan A, Tharyan P. Job stress and satisfaction in faculty of a teaching hospital in south India: A cross-sectional survey. *J Postgrad Med*. 2019 Oct,Dec;65(4):201206. Doi:10.4103/jpgm.JPGM_489_18 . PMID: 31204727; PMCID: PMC6813678.
16. Song KW, Kim HK. Job stress and its related factors among Korean dentists: An online survey study. *Int Dent J*. 2019 Dec;69(6):436-444. Doi: 10.1111/idj.12513. Epub 2019 Aug 6. PMID: 31388997.
17. Nie G, Du J, Liu J, Yuan L, Ma Z. Job stress and suicidal ideation among Chinese clinicians: The moderating role of social support. *J Gen Psychol*. 2020 Apr-Jun;147(2): 109122. Doi: 10.1080/ 00221309.2019.1640657. Epub 2019 Jul 18. PMID: 31318662.
18. Theorell T. A long-term perspective on cardiovascular job stress research. *J Occup Health*. 2019 Jan; 61(1):3-9. Doi: 10.1002/1348-9585.12032. PMID: 30698340; PMCID: PMC6499335.
19. Achour M, Binti Abdul Ghani Azmi I, Bin Isahak M, Mohd Nor MR, Mohd Yusoff MYZ. Job Stress and Nurses Well-Being: Prayer and Age as Moderators. *Community Ment Health J*. 2019 Oct;55(7):1226-1235. Doi: 10.1007/s10597-019-00410-y. Epub 2019 May 20. PMID: 31111298.
20. Kelly M, Soles R, Garcia E, Kundu I. Job Stress, Burnout, Work-Life Balance, Well-Being, and Job Satisfaction Among Pathology Residents and Fellows. *Am J Clin Pathol*. 2020 Mar 9;153(4):449-469. Doi: 10.1093/ajcp/aqaa013. PMID: 32080717.
21. An J, Liu Y, Sun Y, Liu C. Impact of Work-Family Conflict, Job Stress and Job Satisfaction on Seafarer Performance. *Int J Environ Res Public Health*. 2020 Mar 25;17(7):2191. Doi: 10.3390/ijerph17072191. PMID: 32218272; PMCID: PMC7177528.