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A study on factors causing stress among doctors

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Abstract: Work stress can affect doctors physical and mental health by reducing their efficiency and having a pessimistic effect on their quality of life. Stress among doctors is a synergy between the challenging nature of their work and committed personality .Doctors are having a highly demanding nature of work ,both the lack of control and inadequate rewarding systems in the workplace making doctors stressful. Handling unexpected responsibilities may increase the Stress .Work stress can be induced by various factors such as excessive workload and extended work hours to handle critical cases and serious working environments..work stress will also cause a negative impact on their family life . Many factors can enhance stress , including low career growth, lack of managerial relationship with staff, poor working environment and prolonged working hours. Innovation should be implemented in order to reduce work stress among doctors.

Keywords: Work stress, Quality of life, stressors, Working environment, Work life balance, physical and mental illness, stress level, innovation.

INTRODUCTION

As a physiological and psychological response to a distinct threat, stress has been identified. Within the context of the workplace, when an individual perceives the stress of a situation, it sometimes happens to surpass the resources available to meet these demands.Such resources are either organizational, such as levels of workers, workload, and sufficient pay, or personal, such as self-efficacy, avoidance, and distance. Stressors are referred to as the conditions and stresses that trigger stress.Doctors will face high standards and that they will not have adequate time, expertise, and social support at work. Extreme anxiety, burnout, or physical illness will be induced. Doctors would eventually be unable to offer top-quality healthcare services. Stress and burnout can also be expensive since doctors affected can take leave and can even change jobs. It is also required that the medical doctor himself should be free of morbid worries and anxieties in an intact state of mind.. Stress may also influence the attitudes and behaviour of the doctors. Our research idea is based on the rich knowledge acquired by our peer teams across the university.(A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020; Danda et al., 2009; Danda and Ravi, 2011; Dua et al., 2019; Ezhilarasan et al., 2019; Krishnan and Chary, 2015; Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018; Narayanan et al., 2012, 2009; Neelakantan et al., 2013, 2011; Neelakantan and Sharma, 2015; Panchal et al., 2019; Prasanna et al., 2011; Priya S et al., 2009; Rajeshkumar et al., 2019; Ramadurai et al., 2019; Ramakrishnan et al., 2019; Ramesh et al., 2016; Venugopalan et al., 2014)

REVIEW OF LITERATURE

(Wu et al., 2013)explains a total of 1,618 participants were interviewed in a study using a questionnaire. The mean burnout scores for emotional exhaustion were 11.46 (7.51), 6.93 (5.15) for indifference, and 24.07 (9.50) for professional efficacy.

(Kesarwani et al., 2020) says In a systematic study by Indian health care staff, it was recorded that 3845 Indian Health Care Professionals (HCP) were found during a total of 15 studies examining burnout. Within the domain of mental fatigue, the combined frequency of burnout was 24 percent, 27 percent within the domain of depersonalisation, and 23 percent within the domain of personal achievement.

(Romani and Ashkar, 2014) says stress or burnout among Doctors is commonly seen. The presence of stress was reflected as mental fatigue, depersonalization and a low degree of personal achievement. The study noted that more mistakes in judgment and care planning were made by physicians with a higher degree of stress. The research also found out that these individuals had a low personal quality of life.

(Soler et al., 2008) explains about high prevalence (43 percent) of emotional fatigue, 35 percent of demotivation, and a total of 1393 questionnaires were examined. Furthermore, a lack of work satisfaction and the desire to change jobs were associated with high levels of stress.

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(Shanafelt et al., 2014) described there was a high emotional exhaustion prevalence (43 percent), 35 percent demotivation, and a total of 1393 questionnaires were analyzed. Furthermore, a lack of work satisfaction and the desire to change jobs have been linked with high levels of stress.

(Medisauskaite and Kamau, 2019) explainsA total of 227 doctors were interviewed in a randomized control study on the psychology of burnout stress, dealing with patient mortality, and management of distress. The outcome assessment was done before giving training and 7 days after giving training. The interventions significantly reduced the doctor's level of burnout and anxiety. However the interventions did not reduce the health and habit related

(Alosaimi et al., 2018) describes that among the maladaptive stress management, the use of alcohol consumption and substance abuse were seen.

(Koshova et al., 2018) mentions in a paper that self motivation during medical education in post graduation days reduced the incidence of stress in adult life and also made the individual in a position where they could develop better coping mechanisms.

(Lapointe et al., 2018) describes that the absence of regular interaction between nursing staff and residents leads to frequent interruptions in education and patient care, raising tension on residents and the overall workload. The lack of daily contact on residents and the overall workload.

(Simpkin et al., 2018) says that the lack of regular interaction between nursing staff and residents leads to frequent interruptions in the treatment and education of patients, increasing tension on residents and the overall workload. Compared to residents with lower mean resilience levels

RESEARCH METHODOLOGY

A quantitative analysis methodology is applied in the study because the aim of the study is to gain knowledge of an entire population. For a qualitative analysis approach, this could also be done. However, qualitative character observations cannot be statistically interpreted and summarized in figures, since a smaller number of respondents discuss the issue at hand in detail. There are two distinct kinds of information sources that are widely used in science. Secondary and primary data contain these types of data sources. Secondary data is knowledge gathered for a different reason than helping to solve the particular issue at hand. It is further possible to split this sort of data into internal and external secondary data. External secondary information, such as policy papers and annual reports, comes from within an entity and is internal information. A questionnaire is prepared and the survey is collected from the patients and people of all age groups. The collected survey is then processed in spss software and the data is analysed and interpreted. The collected data were classified tabulated and analyzed with the statistical tools like Frequency test, Mean analysis and Regression analysis. The sample profile of the study is represented through the following pie charts.



Age group

Fig.1: The above depicted pie chart explains the percentage of gender in the sample.75% of the sample were Female and 35% were Male respondents

Fig.2: The above depicted pie chart explains the age of the respondents.76.67% of respondents were of 25-35 years and 16.67% of respondents were of 35-45 year of age.whereas,3.33% of respondents were between 25-45 year.



Fig.3: The above depicted pie chart explains that most of respondents had more than 5 years of work experience (58.3 percent), followed by 1-5 years of work experience (28.3 percent) and other work experience (13.3 percent).



Fig.4: The above depicted pie chart explains that 56.67 percent of respondents received less than Rs. 3 lakhs in the survey annual revenue. 25 percent of respondents earned Rs.3-7 lakhs, while 18.33 percent of respondents earned more than Rs.7 lakhs.

S. No	Work stress	Mean	Rank
	I have to handle patients who have unexpected treatment expectations (handle		
1	patients)	3.53	2
2	I have to work overtime (over time)	3.57	1
3	I couldn't manage the workload (work load)	2.90	5
4	I am worried about the competition in workplace(competition)	3.33	3
5	I worry about my performance and job security (performance)	3.30	4
S.No	Work related factors	Mean	Rank
1	I have learned many new jobs skills in my current position(skills)	3.88	1
2	I am appropriately recognized when I perform well in routine job(recognition)	3.62	2
3	There exists a healthy and competitive work environment (healthy competition)	3.35	3
4	The management is receptive to the issues raised(issues)	3.15	4
5	I am satisfied with the promotion opportunities given(promotion)	2.97	5
S. No	Personal factors	Mean	Rank
1	I could not concentrate on physical fitness and energy levels (physical fitness)	3.48	2
2	I don't give time for regular breaks during day and weekend (breaks)	3.50	1
3	I don't meditate/exercise/visit the gym/perform yoga to rejuvenate	3.23	5
	myself(rejuvenate)		
4	I get irritated easily due to my work nature (nature of work)	3.35 3.47	4
5	I get mood changes often (mood changes)		3
S. No	Work life balance		Rank
1	I feel cheerful to come to work(cheerful)	3.67 3.23	1
2	I feel calm and relaxed both in my workplace and home(relaxed)		4
3	I feel active and vigorous both in my workplace and home(active)	3.20	5
3 4 5		3.20 3.45	5 2

Table 1: Mean Analysis

Table 1.indicates the mean analysis of 20 variables. With the help of four factors such as Work stress, Work related factors, personal factors and Work life balance this segment examines the factors that causes stress among doctors. In order to measure the factors causing stress among doctors, the mean analysis is performed. From the table, it is evident that doctors agree overtime work pressures them to maximum extent the most influencing factor among Work stress and the doctors agree job skills motivate them to maximum extent the most influencing factor among Work related factors, it is evident that doctors agree reduced breaks pressures them to maximum extent is the most influencing factor among personal factors and the doctors agree cheerful feel motivates them to maximum extent is the most influencing factors among Work life balance.

Table 2- Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
1	.317ª	.100	.035	.38363		

Table 2 represents the R and R^2 values. The simple correlation is expressed by the R value and is 0.317, which indicates the correlation degree. The R2 value defines how much of the overall variance the independent variable can explain. 10.0 percent, which is an average, can be explained in this situation.

Al	ANOVA ^a							
Model		Sum of Squares	df	Mean Square	F	Sig.		
1	Regression	0.901	4	0.225	1.531	0.206 ^b		
	Residual	8.095	55	0.147				
	Total	8.996	59					

Table 3: Anova

a. Dependent variable: stress; b. predictors: work stress, work related factors, personal factors, work life balance. Table 3 indicates the ANOVA test which interprets that the significant value greater than 0.05 that is 0.206, which means dependent variable stress is not significantly predicted by independent variables namely work stress, work related factor, personal factors, work life balance.

Model		Unstandardised Coefficients		Standardized Coefficients	Т	Sig.
		В	Std. Error	Beta		
1	(constant)	2.633	0.615		4.283	0.000
	Work Stress	0.045	0.100	0.071	0.448	0.656
	Work Related factors	-0.202	0.106	-0.298	-1.902	0.062
	Personal Factors	-0.114	0.072	-0.237	-1.582	0.120
	Work Life Balance	0.088	0.081	0.170	1.082	0.282

Table 4: Coefficients

The table 4 represents regression analysis with B and beta value for the independent and dependent variables which are assumed from the analysis; It is found that all four variables such as job stress, work-related factor, personal variables, and work-life balance do not have a substantial effect on doctor's work stress.

CONCLUSION

Most doctors were found to be unsatisfied with work and among them had more tension. Factors such as age, educational status and stress intensity have emerged as potential influential variables. Workload; pay benefits; safety and security; and workload were correlated with more dissatisfaction. Hence, these variables should be tackled by institutional authority to improve doctor's job satisfaction.

REFERENCES

- 1. A.C.Gomathi, S.R.Xavier Rajarathinam, A.Mohammed Sadiqc, Rajeshkumar, 2020. Anticancer activity of silver nanoparticles synthesized using aqueous fruit shell extract of Tamarindus indica on MCF-7 human breast cancer cell line. J. Drug Deliv. Sci. Technol. 55.
- Alosaimi, F.D., Alawad, H.S., Alamri, A.K., Saeed, A.I., Aljuaydi, K.A., Alotaibi, A.S., Alotaibi, K.M., Alfaris, E.A., 2018. Stress and coping among consultant physicians working in Saudi Arabia. Ann. Saudi Med. 38, 214–224.
- 3. Danda, A.K., Ravi, P., 2011. Effectiveness of postoperative antibiotics in orthognathic surgery: a metaanalysis. J. Oral Maxillofac. Surg. 69, 2650–2656.
- 4. Danda, A.K., S, R., Chinnaswami, R., 2009. Comparison of gap arthroplasty with and without a temporalis muscle flap for the treatment of ankylosis. J. Oral Maxillofac. Surg. 67, 1425–1431.
- Dua, K., Wadhwa, R., Singhvi, G., Rapalli, V., Shukla, S.D., Shastri, M.D., Gupta, G., Satija, S., Mehta, M., Khurana, N., Awasthi, R., Maurya, P.K., Thangavelu, L., S, R., Tambuwala, M.M., Collet, T., Hansbro, P.M., Chellappan, D.K., 2019. The potential of siRNA based drug delivery in respiratory disorders: Recent advances and progress. Drug Dev. Res. 80, 714–730.
- 6. Ezhilarasan, D., Apoorva, V.S., Ashok Vardhan, N., 2019. Syzygium cumini extract induced reactive oxygen species-mediated apoptosis in human oral squamous carcinoma cells. J. Oral Pathol. Med. 48, 115–121.
- Kesarwani, V., Husaain, Z.G., George, J., 2020. Prevalence and Factors Associated with Burnout among Healthcare Professionals in India: A Systematic Review and Meta-Analysis. Indian J. Psychol. Med. 42, 108– 115.
- 8. Koshova, S., Horachuk, V., Pishchykov, V., 2018. Psychological features of the motivation component in the training of doctors in the system of postgraduate education. Wiad. Lek. 71, 723–727.
- 9. Krishnan, R., Chary, K.V., 2015. A rare case modafinil dependence. J. Pharmacol. Pharmacother. 6, 49–50.
- 10. Lapointe, R., Bhesania, S., Tanner, T., Peruri, A., Mehta, P., 2018. An Innovative Approach to Improve Communication and Reduce Physician Stress and Burnout in a University Affiliated Residency Program. J.

Med. Syst. 42, 117.

- Manivannan, I., Ranganathan, S., Gopalakannan, S. et al., 2018. Mechanical Properties and Tribological Behavior of Al6061–SiC–Gr Self-Lubricating Hybrid Nanocomposites. Trans Indian Inst Met 71, 1897– 1911.
- 12. Medisauskaite, A., Kamau, C., 2019. Reducing burnout and anxiety among doctors: Randomized controlled trial. Psychiatry Res. 274, 383–390.
- 13. Narayanan, V., Kannan, R., Sreekumar, K., 2009. Retromandibular approach for reduction and fixation of mandibular condylar fractures: a clinical experience. Int. J. Oral Maxillofac. Surg. 38, 835–839.
- 14. Narayanan, V., Ramadorai, A., Ravi, P., Nirvikalpa, N., 2012. Transmasseteric anterior parotid approach for condylar fractures: experience of 129 cases. Br. J. Oral Maxillofac. Surg. 50, 420–424.
- 15. Neelakantan, P., John, S., Anand, S., Sureshbabu, N., Subbarao, C., 2011. Fluoride release from a new glassionomer cement. Oper. Dent. 36, 80–85.
- Neelakantan, P., Sharma, S., 2015. Pain after single-visit root canal treatment with two single-file systems based on different kinematics--a prospective randomized multicenter clinical study. Clin. Oral Investig. 19, 2211–2217.
- 17. Neelakantan, P., Subbarao, C., Sharma, S., Subbarao, C.V., Garcia-Godoy, F., Gutmann, J.L., 2013. Effectiveness of curcumin against Enterococcus faecalis biofilm. Acta Odontol. Scand. 71, 1453–1457.
- Panchal, V., Jeevanandan, G., Subramanian, E.M.G., 2019. Comparison of post-operative pain after root canal instrumentation with hand K-files, H-files and rotary Kedo-S files in primary teeth: a randomised clinical trial. Eur. Arch. Paediatr. Dent. 20, 467–472.
- 19. Prasanna, N., Subbarao, C.V., Gutmann, J.L., 2011. The efficacy of pre-operative oral medication of lornoxicam and diclofenac potassium on the success of inferior alveolar nerve block in patients with irreversible pulpitis: a double-blind, randomised controlled clinical trial. Int. Endod. J. 44, 330–336.
- 20. Priya S, R., Krishnan, C., S, J.R., Das}, J., 2009. Growth and characterization of NLO active lithium sulphate monohydrate single crystals. Crystal research and technology 44, 1272–76`.
- Rajeshkumar, S., Menon, S., Venkat Kumar, S., Tambuwala, M.M., Bakshi, H.A., Mehta, M., Satija, S., Gupta, G., Chellappan, D.K., Thangavelu, L., Dua, K., 2019. Antibacterial and antioxidant potential of biosynthesized copper nanoparticles mediated through Cissus arnotiana plant extract. J. Photochem. Photobiol. B 197, 111531.
- Ramadurai, N., Gurunathan, D., Samuel, A.V., Subramanian, E., Rodrigues, S.J.L., 2019. Effectiveness of 2% Articaine as an anesthetic agent in children: randomized controlled trial. Clin. Oral Investig. 23, 3543– 3550.
- 23. Ramakrishnan, M., Dhanalakshmi, R., Subramanian, E.M.G., 2019. Survival rate of different fixed posterior space maintainers used in Paediatric Dentistry A systematic review. Saudi Dent J 31, 165–172.
- 24. Ramesh, A., Varghese, S.S., Doraiswamy, J.N., Malaiappan, S., 2016. Herbs as an antioxidant arsenal for periodontal diseases. J Intercult Ethnopharmacol 5, 92–96.
- 25. Romani, M., Ashkar, K., 2014. Burnout among physicians. Libyan J. Med. 9, 23556.
- Shanafelt, T.D., Raymond, M., Kosty, M., Satele, D., Horn, L., Pippen, J., Chu, Q., Chew, H., Clark, W.B., Hanley, A.E., Sloan, J., Gradishar, W.J., 2014. Satisfaction with work-life balance and the career and retirement plans of US oncologists. J. Clin. Oncol. 32, 1127–1135.
- Simpkin, A.L., Khan, A., West, D.C., Garcia, B.M., Sectish, T.C., Spector, N.D., Landrigan, C.P., 2018. Stress From Uncertainty and Resilience Among Depressed and Burned Out Residents: A Cross-Sectional Study. Acad. Pediatr. 18, 698–704.
- Soler, J.K., Yaman, H., Esteva, M., Dobbs, F., Asenova, R.S., Katic, M., Ozvacic, Z., Desgranges, J.P., Moreau, A., Lionis, C., Others, 2008. European general practice research network burnout study group: burnout in European family doctors: the EGPRN study. Fam. Pract. 25, 245–265.
- 29. Venugopalan, S., Ariga, P., Aggarwal, P., Viswanath, A., 2014. Magnetically retained silicone facial prosthesis. Niger. J. Clin. Pract. 17, 260–264.
- 30. Wu, H., Liu, L., Wang, Y., Gao, F., Zhao, X., Wang, L., 2013. Factors associated with burnout among Chinese hospital doctors: a cross-sectional study. BMC Public Health 13, 786.