2018

www.jmscr.igmpublication.org Impact Factor (SJIF): 6.379 Index Copernicus Value: 71.58 ISSN (e)-2347-176x ISSN (p) 2455-0450 crossref DOI: https://dx.doi.org/10.18535/jmscr/v6i3.26



Journal Of Medical Science And Clinical Research An Official Publication Of IGM Publication

Occupational Stress among Police Personnel of Gadchiroli City, India

Authors

Shilpa Lanjewar¹, Uday Narlawar², Sandip Zurmure³, Rajan K. Barnwal⁴, Ujjwal Sourav⁵, Hemant Adikane⁶, Nitin Bavdekar⁷

¹Asso. Prof., ²Prof. & Head, Department of Community Medicine, ^{3,4,5,7}Post Graduate Residents, Department of Community Medicine GMC Nagpur; ⁶Asst. Prof. GMC, Gondia

Corresponding Author

Sandip Zurmure

Government Medical College, Nagpur, India Email: *szurmure@rediffmail.com*

Abstract

Introduction: Police work tends to impose a high degree of stress and a multiplicity of stressful situations which can affect the physical, mental and interpersonal relationships of police personnel. The objective of the present study was to assess the level of stress among police personnel and to find the association of various factors with the level of stress among police personnel.

Method: A cross-sectional study was conducted among 180 police personnel in Gadchiroli city. A structured questionnaire based on The Professional Life Stress Test by Fontana was given to all participants. The total score obtained for each respondent was considered as a measure of stress level.

Results: A halves of the police personnel were subjected to stress as a result of unsettled conflicts with colleagues, didn't have enough time to spend on themselves, couldn't speak mind to their boss, the amount of work they had to do exceed the amount of time available, Couldn't get up late on weekends if they want to without feeling guilty.

Conclusion: The half of police personnel studied were under stress at their workplace due to a variety of stressors. This indicates the necessity to modify the organizational environment within the police force. **Keywords:** Occupational stress, Police personnel, Stress level, Gadchiroli, David Fontana.

Introduction

Stress can be defined as a physiological response to physical and mental demands or "An interaction between environmental forces and events called stress precipitators, which appear threatening to the person's reaction to the threat".¹

Evidence from the Health and Safety Executive suggests that 20% of workers feel 'very' or 'extremely' stressed at work, with the proportion rising to 49% in some occupational groups.²

In the Occupational Disease Intelligence Network (ODIN) system for Surveillance of Occupational Stress and Mental Illness (SOSMI) in Manchester, policing features among the top three occupations most commonly associated with workplace stress by both occupational physicians and psychiatrists.³

In the United Kingdom, levels of suicide several times higher than in age-matched populations are being reported among police officers.^{4,5}

Certain job-related factors among Indian police personnel act as specific stressors, for example working conditions, work overload, lack of recognition, fear of severe injury or being killed on duty, inadequate equipment, shooting someone in the line of duty, anti-terrorist operations, confrontation with the public, lack of job satisfaction and Police hierarchy.⁶

The present study examines police personnel, whose occupation is generally perceived as highly stressful. The subjective stress caused by daily living or working situations may lead to various minor mental health problems and subsequent changes in job performance and quality of life. Hence, this study was undertaken to assess the level of stress among police personnel and to find the association of specific factors with the level of stress among police personnel in Gadchiroli city, India

Method

This cross-sectional study was conducted among police personnel in Gadchiroli city, India, between December and February 2018. Permission was obtained from institutional ethical committee and from the higher authorities of police station. 180 police personnel participated in the study. Routine roll-call was selected as the most appropriate time to undertake the study to ensure most of participants were present. However some participants completed the study proforma in their leisure time.

The aim of the study and how to respond the questions were explained to each respondent. Informed consent was taken before they participated in the study.

A structured questionnaire, written in the local language, was given to all the participants. A total 24 questions were included in the questionnaire about the respondent's own life.7 Questions about stress were based on The Professional Life Stress Test by Fontana. Participant's verbal descriptions of perceived stress were linked to a numerical scoring system with responses such as 'yes', 'no', 'often', 'sometimes', or 'very rarely' being given scores between zero and four, respectively. The total score from each respondent was calculated and used as an indicator of stress, rather than a precise measurement tool.

Results

A total of 146 males (81.11%) and 34 females (18.89%) police personnel were included in the study. The participants comprised of 19 police Sub-inspectors, 1 Assistant. Sub-inspector rank officials, 23 Naik police constables, 6 Head constables and 131 were police Constables.

The sociodemographic characteristics are shown in Table 1. The minimum age of participants was 21 years while the maximum age was 56 years, with a mean age of 32.54 ± 9.31 years. About a three fourth of participants (75.00%) were in the age group 21-30 years. 140 (77.77%) participants were married while 39 (21.66%) participants were unmarried. Regarding their education, majority of the participants 155 (86.11%) were graduates and 20 (11.11%) had completed H.S.C. qualifications. Majority of participants 160(88.88%) worked more than 12 hours a day.

Although they were working in periodic shifts, almost all worked hours exceeding 12 hours daily. Most of the participants 162 (90.00%) were living in nuclear family.

Table 2 shows the different stressors among the police personnel. A half of the police personnel were subjected to stress as a result of unsettled conflicts with colleagues, didn't have enough time to spend on themselves, couldn't speak mind to their boss, the amount of work they had to do exceed the amount of time available, couldn't get up late on weekends if they want to without feeling guilty.

Table 3 shows the association of different factors and level of stress among police personnel. A significant association was found between age group, education and type of family with the level of stress among the studied police personnel.

		51	1		
Variables		Males (%)	Females (%)	Total (%)	
		n=146	n=34	n=180	
Age	21-30	108 (73.97)	27 (79.41)	135 (75.00)	
group	31-40	12 (08.21)	04 (11.76)	16 (08.88)	
	41-50	14 (09.58)	01 (02.94)	15 (08.33)	
	51-60	12 (08.21)	02 (05.88)	14 (07.77)	
Marital	Married	125 (85.61)	15 (44.11)	140 (77.77)	
status	Unmarried	21 (14.38)	18 (52.94)	39 (21.66)	
	Widower/wid	00 (00.00)	01 (02.94)	01 (00.55)	
	ow				
Education	Middle School	00 (00.00)	01 (02.94)	01 (00.55)	
	S.S.C.	02 (01.36)	01 (02.94)	03 (01.66)	
	H.S.C.	19 (13.01)	01 (02.94)	20 (11.11)	
	Graduation/	124 (84.93)	31 (91.17)	155 (86.11)	
	Post				
	graduation				
	Professional	01 (00.68)	00 (00.00)	01 (00.55)	
	Degree				
Type of	Nuclear	139 (95.20)	23 (67.64)	162 (90.00)	
family	Three	07 (04.80)	11 (32.35)	18 (10.00)	
	Generations				
Working	Upto 12 hours	20 (13.69)	00 (00.00)	20 (11.11)	
hours	>12 hours	126 (86.30)	34 (100)	160 (88.88)	
Designati	Constables	100 (68.49)	31 (91.17)	131 (72.77)	
on	Head-	05 (03.42)	01 (02.94)	06 (03.33)	
	constables				
	NPC	21 (14.38)	02 (05.88)	23 (12.77)	
	ASI	01 (00.68)	00 (00.00)	01 (00.55)	
	PSI	19 (13.01)	00 (00.00)	19 (10.55)	
Service	1-5	84 (57.53)	29 (85.29)	113 (62.77)	
duration	6-10	35 (23.97)	01 (02.94)	36 (20.00)	
(years)	11-15	04 (02.73)	02 (05.88)	06 (03.33)	
	16-20	08 (05.47)	00 (00.00)	08 (04.44)	
	>20	15 (10.27)	02 (05.88)	17 (09.44)	

Table 1: Profile of study participants

 Table 2: Different stressors among the police

 personnel

Stressors	Response	Frequency	
Do you feel most of the time that you have unsettled conflicts with colleagues?	Yes	80%	
Would you say that generally you have enough time to spend on yourself?	No	68%	
Within reasonable professional and personal limits, can you speak your mind to your boss?	No	66%	
Does the amount of work you have to do exceed the amount of time available?	Habitually	57.5%	
Can you get up late on weekends if you want to without feeling guilty?	No	54%	

Table 3: Association of different factors and level

 of stress among police personnel

Factors	Parameters	Total score		P value
		≤15	>15	
		(no stress)	(stress)	
Age group	21-30	72	63	*0.0045
	31-40	11	5	
	41-50	04	11	
	51-60	03	11	
Gender	Male	68	78	0.0865
	Female	22	12	
Marital status	Married	69	71	0.8577
	Unmarried	21	18	
	Widow	00	01	
Education	Middle School	00	01	*0.0043
	S.S.C.	01	02	
	H.S.C.	04	16	
	Graduation/ Post graduation	85	70	
	Professional Degree	00	01	
Type of Family	Nuclear	87	72	*0.0049
	Three Generations	03	15	
Working hours	Upto 12 hours	10	10	0.8125
3	>12 hours	80	80	

Discussion

Stress is an important factor influencing individual efficacy and satisfaction in modern day occupational settings. This study investigates the level of stress among police personnel and different factors associated with stress levels among police in Gadchiroli city, India.

In the present study most of the participants (88.88%) were working for more than 12 hours daily. Although they were working in periodic shifts, almost all had working hours exceeding 12 hours daily. Long working hours appear to be an important factor leading to stress among police personnel. This is consistent with Vila's study from Washington⁸ which stated that long working hours and shift work threatened police officers' health, safety, and performance. In our study a total of 90 (50.00%) participants scored ≤ 15 , indicating that stress in workplace presents no problem while 81 (45.00%) participants scored between 16-30 which suggest that stress in workplace was likely to be causing a problem. 9 (05.00%) personnel had a score of 31-45 where stress was clearly a problem, and the need for remedial action was apparent. Important stressors among the police personnel we studied were unsettled conflicts with colleagues, didn't have enough time to spend on himself, couldn't speak mind to their boss, the amount of work they had to do exceed the amount of time available, couldn't get up late on weekends if they want to without feeling guilty. Our results support earlier research of police officers suffering from stress due to their occupation.⁹ Similar occupational stress prevalence and stressors were found in study conducted in Wardha¹⁰ and Puduchery¹¹. Some studies also reported that Police personnel are under continuous and constant stress due to similar stressors that lead to psychiatric morbidity.12,13 However some studies have confirmed that organizational culture and workload are the key issues in police officer stress.¹⁴

In our study, a significant association of stress levels among police personnel was found with different factors (p< 0.05). There were significant differences for age, education and type of family.

Level of mental stress was higher in age group more than 40 years than police personnels having age less than 40 years. Level of mental stress was higher in police personnel having education level H.S.C. or less than those having education of graduation or more. Level of mental stress was higher in police personnel living in three generation family than who were living in nuclear family.

Gershon et al found that the most important risk factors associated with perceived work stress among police officers in the US aged \geq 50 years were maladaptive coping behaviors (e.g. excessive drinking or problem gambling) and exposure to critical incidents (e.g. shootings). Also, perceived work stress was significantly associated with anxiety, depression, somatization, posttraumatic symptoms of stress and/or burnout, chronic back pain, alcohol abuse, and inappropriately aggressive behavior.¹⁵

In our study, a significant association between gender and mental stress was not found.

A significant association between gender and mental ill-health was found, with females more likely to score more than males.¹⁴

Occupational stress among police personnel can reduce productivity, encourage absenteeism, lower morale, increase conflict with others, cause physical and emotional problems and poor satisfaction with life.

Limitations of the present study include the use of self-administered questionnaires as the results are thus based entirely on the respondents' honesty and how they perceived their attitudes towards the variables used in this study. Secondly, since this study was based on a cross-sectional research design, caution about causality must be taken into account when drawing conclusions about associations. Also the male predominance in the study population made it rather difficult to study correct gender-related patterns.

Conclusion

The half of police personnel studied reported stress at the workplace. A significant association of stress level among police personnel was found between age group, education and type of family.

Hence there is a need for resources to be directed towards exploring effective ways of modifying the organization of workload and improving the management environment. Also introduction of periodical health examination may be required to detect any morbidity developing or existing among the police personnel.

Acknowledgement

We are highly thankful to all the study participants.

References

- Rogers RE, Li EY, Shani AB. Perceptions of Organizational Stress among U.S. Military Officers inGermany: An Exploratory Study. Group Organization Management 1987: 12(2); 189-207.
- 2. Health & Safety Executive (HSE). The Scale of Occupational Stress. The Bristol Stress and Health at work Study, Contract Research Report. 2000: 212-218.
- Centre for Occupational & Environmental Health. Occupational Physicians Reporting Activity. Quarterly Report. Manchester: University of Manchester, March 2000.
- Schmitdke A, Fricke S, Lester D. Suicide among German federal and state police officers. Psychol Rep 1999; 84:157–66.
- McCafferty F, McCafferty E, McCafferty M. Stress and suicide in police officers: paradigm of occupational stress. South Med J 1992;85:223–43
- 6. Mathur P., Stress in police personnel: A preliminary survey. NPA magazine1993: 45 (2).
- David Fontana. Professional Life Stress Scale. Managing Stress, the British Psychological Society and Routledge Ltd, 1989.
- Bryan Vila. Impact of long work hours on police officers and the communities they serve. Am J of Industrial Medicine 2006 : 49 (11); 972-80
- 9. Mathur P. Perceptions of police stress: An empirical study of stressors and coping

response among police personnel in India. Indian journal of criminology1995: 23 (1);9-19.

- Selokar D, Nimbarte S, Ahana S, Gaidhane A, Wagh V. Occupational stress among police personnel of Wardha city, India. Australas Med J. 2011;4(3):114–7.
- Ramakrishnan J, Majgi SM, Premarajan KC, Lakshminarayanan S, Thangaraj S, Chinnakali P. High prevalence of cardiovascular risk factors among policemen in Puducherry, South India. J Cardiovasc Dis Res [Internet]. 2013;4(2):112–5. Available from: http://dx.doi.org/10.1016/j.jcdr.2013.05.002
- 12. Channa S.M, Gururaj.G, Chaturvedi S.K, Prabha.S.C. Occupational stress and mental health of Police Personnel in India. NIMHANS publication, 1996.
- Spraag GS. Post traumatic stress disorder. MJA. 1992; 156(10): 731-3.
- Collins PA, Gibbs ACC. Stress in police officers: a study of the origins, prevalence and severity of stress-related symptoms within a county police force. Occup Med. 2003; 53: 256–64
- 15. Gershon RRM, Lin S, Li X. Work stress in aging police officer. JOEM. 2002; 44(2): pp.160.