



Occupational stress among police personnel of Wardha city, India

Selokar D, Nimbarte S, Ahana S, Gaidhane A, Wagh V

Jawaharlal Nehru Medical College, DMIMSU Sawangi(M), Wardha, India

RESEARCH

Please cite this paper as: Selokar D, Nimbarte S, S Ahana, Gaidhane A, Wagh V. Occupational stress among police personnel of Wardha City, India. AMJ 2011, 4, 3, 114-7 Doi: <http://dx.doi.org/10.4066/AMJ.2011.562>

Corresponding Author:

Dr Deepak Selokar
Assistant Professor, JN Medical College,
Sawangi (M), Wardha
[Email@address: deepakselokar@yahoo.co.in](mailto:deepakselokar@yahoo.co.in)

Abstract

Background

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 102 police personnel in Wardha city. A structured questionnaire based on The Professional Life Stress Test by Fontana was given to all participants. A grading scale was used to link participant's verbal descriptions of perceived stress to a numerical scoring system being given scores between zero and five. The total score obtained for each respondent was considered as a measure of stress level.

Results

Different stressors that were identified among the police personnel included criticism by superiors, excess work, no rewards, inadequate value given to abilities and commitments and no satisfaction from work. Seventy participants scored >15 which indicated that stress in the workplace was a problem, while 32 participants scored ≤15, indicating stress in the workplace was not a problem. A significant association was found with between age group, marital status, education and working hours and the level of stress among police personnel.

Conclusion

The majority 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.

Key Words

Occupational stress, Police personnel, Stress level

Background

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 Wardha city, India

Method

This cross-sectional study was conducted among police personnel in Wardha city, India, between February and May 2009. Permission was obtained from institutional ethical committee and from the higher authorities of police station. The study included all personnel working within the city police stations of Wardha and Sewagram. Out of 113 police



personnel, 102 police personnel participated in the study. Two police personnel were on medical leave and nine, who were posted in election duties, were excluded.

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 was explain 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 participants. A total 24 questions were included in the questionnaire about the respondent's own life. Questions about stress were based on The Professional Life Stress Test by Fontana.⁷ 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.

Scores⁷ were graded as:

≤15 = stress is not a problem in the life of personnel who scored this level of stress

16-30 = a moderate range of stress for a busy professional person. It indicates that it is worth looking at how stress can reasonably be reduced.

31-45 = stress is clearly a problem, and the need for remedial action is apparent. The longer the individual works under this level of stress, the harder it often is to rectify the situation.

45-60 = at these levels, stress is a major problem, and something must be done without delay.

Sociodemographic information like age, sex, working hours, addiction (tobacco use), marital status, type of family and education was collected. Information was also collected about any existing morbidity among participants. The outcome variable assessed was the level of stress among police personnel. Data was analyzed and tabulated using frequency distribution tables and proportions. The association between various factors and level of stress were examined using the Chi-square test.

Results

A total of 97 male (95.1%) and five female (4.9%) police personnel were included in the study. The participants comprised of two police inspectors, two assistant police inspectors, five police sub-inspectors, 8 assistant. sub-inspector rank officials, 11 head constables and 74 were police constables.

The sociodemographic characteristics are shown in Table 1. The minimum age of participants was 21 years while the maximum age was 57 years, with a mean age of 36 (SD ± 9.31) years. About a third of participants (34.3%) were in the age group 31-40 years. Seventy-three (71.6%) participants were married while 17 (16.7%) participants were separated. Regarding their education, most of the participants (38.2%) were graduates and 11 (10.8%) had completed post-graduation qualifications. Most

participants (82.4%) worked more than 8 hours a day. Although they were working in periodic shifts, almost all worked hours exceeding 12 hours daily. Among the male participants; 80.4% personnel were tobacco users. Most of the participants (72.5%) were living in nuclear family. Regarding morbidity status 18 (17.6%) participants had hypertension, six (5.9%) had diabetes and two (1.9%) had tuberculosis.

Table 1: Profile of study participants

Variables		Males (n=97)	Females (n=5)	Total (n=102)
Age group (yrs)	21-30	31(32)	1(20)	32(31.4)
	31-40	33(34)	2(40)	35(34.3)
	41-50	23(23.7)	2(40)	25(24.5)
	51-60	10(10.3)	-	10(9.8)
Marital status	Unmarried	10(10.3)	-	10(9.8)
	Married	70(72.2)	3(60)	73(71.6)
	Separated	16(16.5)	1(20)	17(16.7)
	Divorced	1(1)	1(20)	2(2)
Education	10 th	9(9.3)	-	9(8.8)
	12 th	41(42.3)	2(40)	43(42.2)
	Graduate	36(37.1)	3(60)	39(38.2)
	Post-graduate	11(11.3)	-	11(10.8)
Working hours	8hrs	13(13.4)	5(100)	18(17.6)
	>8hrs	84(86.6)	-	84(82.4)
Addiction	Yes	78(80.4)	-	78(76.5)
	No	19(19.6)	5(100)	24(23.5)
Type of family	Nuclear	72(74.2)	2(40)	74(72.5)
	Joint	25(25.8)	3(60)	28(27.5)

Table 2 shows the different stressors among the police personnel. A majority of the police personnel were subjected to stress as a result of criticism by superiors, working hours always exceeding shift hours, feeling inadequately rewarded, feeling inadequately valued for abilities and commitments and not feeling satisfied after finishing their work.

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

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 Wardha city, India.



Table 2: Different stressors among the police personnel

Stressors	Frequency	Response
Opinion of colleagues	66	'X is great. But you have to be careful what you say to him/her at times.'
Common features of life	29	Four features
Enjoying watching sports	87	Yes
Get up late on weekends without feeling guilty	98	Yes
Share any matter with colleague	82	yes
Seems to be responsible for making important decisions in your life	98	Someone else
Upset when criticized by superiors at work	51	Mildly upset
Feeling satisfied after finishing daily work	60	Sometimes
Total duration of working hours exceeds fixed duty hours	64	Habitually
Have a clear picture what to do	41	Sometimes
Enough time to spend yourself	87	No
Reasonably on course towards achieving major objectives in life	71	Yes
Bored at work	93	Very rarely
Look forward to going into work	58	Some days
Adequately valued for abilities and commitments	68	No
Adequately rewarded	76	No
Career progression	41	Fulfilling expectations
How much you like yourself	56	Rating 5

Table 3: Association of different factors and level of stress among police personnel

Factors	Parameters	Total score		P value
		≤15 (no stress)	>15 (stress)	
Age group	21-30	21	11	0.000*
	31-40	10	25	
	41-50	1	24	
	51-60	0	10	
Sex	Male	29	68	0.15
	Female	3	2	
Marital status	Unmarried	9	1	0.000*
	Married	24	50	
	Separated	0	17	
	Divorced	00	2	
Education	10 th	0	9	0.042*
	12 th	17	26	
	Graduate	14	25	
	Postgraduate	1	10	
Working hours	8hrs	13	5	0.000*
	>8hrs	19	65	

*significant p value

In the present study most of the participants (82.4%) were working hours more than eight hours daily. Although they were working in periodic shifts, almost all were 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 that found that long working hours and shift work threatened police officers' health, safety, and performance. This situation is aggravated by understaffing associated with demographic shifts and new threats to homeland security.

In our study a total of 32 (31.4%) participants scored ≤15, indicating that stress in workplace presents no problem while 68 (66.7%) participants scored between 15-30 which suggest that stress in workplace was likely to be causing a problem. Two 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 criticism by superiors, working hours always exceeding the amount of time available, lack of rewards, the feeling of being inadequately valued for abilities and commitments, not feeling satisfied after finishing their work and not having enough time to spend themselves.

Our results support earlier research of police officers suffering from stress due to their occupation.⁹ Some studies also reported that Police personnel are under continuous and constant stress due to similar stressors that lead to psychiatric morbidity.^{10, 11} However some studies have confirmed that organizational culture and workload are the key issues in police officer stress.¹²

In our study, a significant association of stress levels among police personnel was found with different factors (p< 0.05).



There were significant differences in marital status, with the individuals who were divorced or separated reporting higher levels of stress. Increased stress levels associated with increased working hours indicate an area where stress awareness and management training may be able to target with good impact. As the age of the participants increased, measured stress levels also increased.

Gershon et al found that the most important risk factors associated with perceived work stress among police officers in the US aged ≥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.¹³

A significant association between gender and mental ill-health was found, with females more likely to score more than males.¹²

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 impossible to study gender-related patterns.

Conclusion

The majority of police personnel studied reported stress at the workplace. A significant association of stress level among police personnel was found between age group, marital status, education and working hours. 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.

4. Schmitdke A, Fricke S, Lester D. Suicide among German federal and state police officers. *Psychol Rep* 1999; 84:157–66.
5. 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 magazine*1993: 45 (2).
7. David Fontana. *Professional Life Stress Scale*. Managing Stress, the British Psychological Society and Routledge Ltd, 1989.
8. 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 criminology*1995: 23 (1);9-19.
10. Channa S.M, Gururaj.G, Chaturvedi S.K, Prabha.S.C. Occupational stress and mental health of Police Personnel in India. NIMHANS publication, 1996.
11. Spragg GS. Post traumatic stress disorder. *MJA*. 1992; 156(10): 731-3.
12. 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
13. Gershon RRM, Lin S, Li X. Work stress in aging police officer. *JOEM*. 2002; 44(2): pp.160

PEER REVIEW

Not commissioned, externally peer reviewed.

ACKNOWLEDGEMENTS

The authors sincerely acknowledge Dr. Dinesh Adewar and Dr. Deepti Agarwal , Intern, for providing help during data collection.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests

References

1. Rogers RE, Li EY, Shani AB. Perceptions of Organizational Stress among U.S. Military Officers in Germany: 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.
3. Centre for Occupational & Environmental Health. Occupational Physicians Reporting Activity. Quarterly Report. Manchester: University of Manchester, March 2000.