



EXPLORING THE HEALTH STATUS AND MEDICAL AILMENTS AMONG POLICE PERSONNEL; AN APPROACH ENSURING WELLBEING AT THE WORKPLACE

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Abstract

A survey was conducted at Captain (R) Syed Ahmed Mubeen Shaheed Traffic Police Lines Manawan Lahore including 1400 participants from Lahore and its surrounding areas, to assess the health conditions and workplace satisfaction among traffic police personnel. A structured questionnaire based on their demographic profile, physical health, mental health, socio-economic status, and work-related problems was used. Traffic police officers were informed and briefed on the purpose of the study. Data was entered and analyzed on SPSS (Statistical Package for Social Sciences) version 25. The survey showed that these officers are having multiple issues regarding their general health leading to several diseases, among which allergies (31.2%) tops the list followed by visual defects (21.7%), hypertension (17.6%) and physical injuries (17.1%). This survey aimed to provide the basic workplace facilities to these traffic personnel to enhance their professional satisfaction. Various policies could be designed by their administrative authorities to encourage their attitude towards profession and increase their competency. It will lead to provision of better services to the public.

Conclusion: The traffic police staff in Pakistan is facing multiple problems while in the workplace which is affecting their competency. These issues should be directed to the administration to design policies for improving their occupational health through health education and strengthening social support.

Key Words: Traffic Police Personnel; Occupational Health; Policies and Procedures; Better Public Services

Introduction

Traffic Police Personnel serving as the frontline protectors of law-and-order face countless challenges in performing their daily duties. Considering this high-risk and stressful profession, the health status of police officers including their physical, social, and mental well-being is of supreme importance.¹ Moreover, workplace environment such as duty schedules, leadership, dealing with criminals, and exposure to traumatic injuries could cause a range of health issues that can significantly impact their quality of life and effectiveness in performing their role.^{2,3}

Considering these visible dangers of the job, the implications of poor health at the workplace, self-esteem, and public safety, there is an urgent need for comprehensive support systems such as policy-making and preventive measures for these police officers to improve their efficiency during working hours.⁴ By implementing preventive measures and regular health checkups, we can raise awareness about the importance of health and offer stress management policies that include mental health support services for patrol officers. This approach will ensure the well-being of those who dedicate their lives to protect society.⁵

Analysis of different epidemiologic data has shown that non-standard working hours could also lead to increased risk of cardiovascular diseases, diabetes, and various mental health issues among police professionals.⁶

This article aims to address the basic health status and prevalence of various medical ailments including bone injuries, visual problems, ischemic heart disease, chronic liver and kidney diseases among law enforcement professionals, shedding light on the obstacles faced by such officers at the workplace.⁷ Recognizing these health issues among police personnel, this survey will help in making strategies aimed at enhancing mutual efforts between law enforcement agencies, healthcare providers, and policymakers to implement programs according to the requirements of this vital workforce.^{8,9} Identifying these areas and their mitigation will provide high-quality police work to the public.

Material and Methods

It was a descriptive cross-sectional study conducted at Captain (R) Syed Ahmed Mubeen Shaheed Traffic Police Lines Manawan Lahore. The study aimed to assess the numerous factors affecting traffic police officers in various cities of Pakistan. A total of 1400 participants were included in the survey, the majority from Lahore and its surroundings. The staff having work experience of less than six months were excluded. A structured questionnaire using an interview-based technique was used to collect data through a non-probability, convenience sampling technique. The data was collected about their physical and mental health by asking various questions from a questionnaire and reviewing their medical reports. An informed consent was also signed from all the participants at the start of the study.

The questionnaire was based on their demographic profile, physical health, mental health, socio-economic status, and work-related problems. Traffic police officers were informed and briefed on the purpose of the study. Data was entered and analyzed on SPSS (Statistical Package for Social Sciences) version 25. The data was presented in the form of frequency table and bar chart. The survey was conducted within six months from Jan-June 2024.

Results

An occupational health survey was conducted by the staff of Chughtai Institute of Pathology at Captain (R) Syed Ahmed Mubeen Shaheed Traffic Police Lines Manawan Lahore. In this survey, 1400 police officers were included. 66 % of the subjects were residents of Lahore and 96% of the subjects were below 50 years of age. The mean age of the participants was 36 years. Almost 54% of the subjects were graduates and 39% had an educational level of postgraduate.

The frequency of different diseases among traffic police personnel is shown in Table 1.

Table 1: Frequencies of different Ailments among Traffic Police Personnel

Sr. No.	Health Issue	No. of Positive Cases (n)	Frequency (%)
1	Anemia	48	3.4
2	Diabetes Mellitus	120	8.6
3	Hypertension	246	17.6
4	Ischemic Heart Disease	47	3.4
5	Hepatitis B	19	1.4

6	Hepatitis C	56	4
7	Liver Disease	55	3.9
8	Renal Disease	116	8.3
9	Fractures	227	16.3
10	Physical Injuries	239	17.1
11	Varicose Vein	64	4.6
12	Visual Defects	304	21.7
13	Hearing Defects	90	6.4
14	Asthma	79	5.6
15	Allergy	437	31.2

**These results are based on the sample size of 1400 staff members*

Upon inquiring about physical injuries, the survey revealed that 228 subjects (16.3%) had a history of fracture with 3.4% undergoing orthopedic intervention. The commonest site of fracture was the arm/ forearm involving the tibia and fibula while 17.1% of the subjects reported physical injuries other than fractures and only 8.3% of the subjects reported renal disease. Figure 1 shows the frequency of some other causes of poor health among traffic police staff.

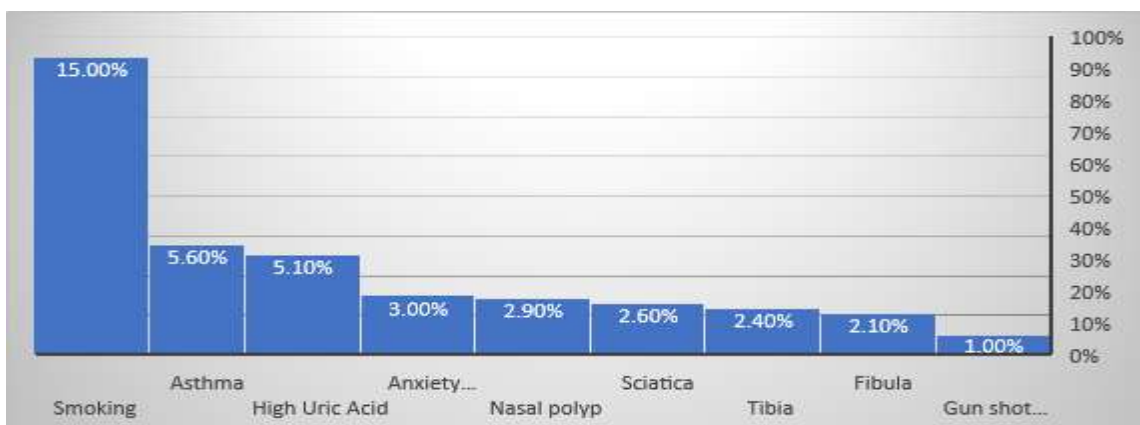


Figure 1: Factors impacting the performance of traffic staff at the workplace

The most common issue noticed was inhalational allergy. This inhalational allergy was more common in individuals performing duties in Lahore which is a densely populated city having high traffic load and pollution. The allergy was aggravated after performing duties in extreme weather and dust exposure during duty hours. The majority of the traffic police force who had hearing difficulties belonged to Lahore and this can indicate exposure to high frequency noise index. ¹⁰

Upon inquiring, difficult duty was a major reason for anxiety and depression among traffic police officers and wardens. A total of 3% of the individuals reported diagnosed anxiety and depression for which they were taking some kind of therapy or medicine. The rest of the others never got screened or were unaware if they were having any kind of psychiatric disorder and never asked for medical help. Almost 2.6% of the staff had sciatica or nerve pains highlighting the importance of ergonomics and personal protective equipment at the workplace.

Other conditions reported by the police force by Health Assessment Survey Traffic Police Lahore, 2024 were Road traffic injury/Fall during duty/Fire Arm injury, Myalgia, Migraine, Bells palsy, stroke, hernia, Joint Pain/Rheumatoid Arthritis/Disc Bulge, GIT infection, inflammatory bowel disease, and skin allergies. Among these conditions fatigue, body aches and arthritis were most common.

Conditions more common in police officers less than 50 years of age were Diabetes Mellitus, hypertension, ischemic heart disease, and poor vision. It was noticed that many officers got poor

vision and diabetes after induction and performing duty for a few years. A few of the officers also got gunshot wounds on duty while stopping the motorbike passengers who were violating the traffic rules after committing dacoity and having fear of being caught, they fired at the traffic police officers.

Discussion

The role of traffic police officers is important not only in maintaining the flow of traffic but also in avoiding unfavorable circumstances and roadside accidents. In keeping law and order, the physical, mental, and social health of these officers is impacted by several important areas, which are highlighted in this article along with tools and suggestions towards a balanced lifestyle.¹¹ Majority of the issues are related to their work-life balance, whereas many health aspects may be disrupted based on the resources available at the workplace for more efficient performance. These traffic police officers are facing weather harshness, dust and smoke, extended duty hours, inadequate personal protective equipment like masks and eye covers, and inadequate nutrition to cope with their duty.¹² All these factors could lead to poor health status and aggravate stress and risk factors for many diseases. Keeping in view all these factors we can suggest policies for improving their work schedule, duty hours, ergonomics, and nutritional status by coordinating with their administrative staff.^{13,14}

This survey conducted by the Chughtai Institute of Pathology involved the traffic police staff of Lahore and its nearby cities having 1400 participants. This inspection showed that among all the ailments, allergy tops the list and is more prevalent among staff residing in Lahore probably due to the High pollution Index of this city. Furthermore, exposure to excessive carbon monoxide levels when directing traffic can affect the health of police officers.¹⁵ This not only causes health problems but also causes a financial burden on the family by repeated physician appointments and medication. By recognizing the causative agents, we could provide the staff with possible aids e.g. masks, to protect them from such conditions. A similar survey conducted in Bangladesh in 2021 demonstrated that respiratory health problems were common among traffic police in Dhaka.¹⁶

In one of the meetings of the United Nations High Commissioner for Refugees (UNHCR) in September 2001, it was emphasized that police activities to a larger extent are performed in close contact with the public and police efficiency is dependent on public support.¹⁷ However, in Pakistan, traffic police officers deal with many behavioral problems in guiding people about traffic rules and asking them to follow these rules. The aggressiveness of some people could lead to a situation in which the traffic officers seem to be helpless and are blamed for their attitude. These social pressures aggravate emotional imbalance affecting their efficiency at work and negative attitude towards duty. To deal with such problems, stress management and conflict resolution workshops could be arranged. The lives of these traffic officers are at stake while being on the roads for a long time. These officers face many physical injuries including fractures of the forearm, tibia, and fibula, and other roadside accidents adding to their injury leaves.¹⁸ It could also lead to a physical disability which is lifelong debility. In Pakistan, no policies are available for such staff members and no financial aid is provided to such families. This study will help in policy making and implementing rules and regulations for helping these officers.

A systematic review, conducted in 2019, on occupational hazards among police officers worldwide, showed various injuries and diseases for formulating a policy serving as a benchmark for solving such issues.¹⁹ Many traffic police officers suffer from anxiety, depression, and psychological disorders by witnessing traumatic events and horrific incidents. These with feelings of low personal accomplishment and high depersonalization had anger and emotional exhaustion leading towards smoking habits eventually causing hypertension and cardiac problems.²⁰

With the ultimate goal of delivering a safe, healthy, and productive working environment, the study has clarified the necessity of an occupational safety and health plan for traffic police. This strategy should be implemented by all pertinent entities, including the government, the business community, and the general public. The results of this study will influence management actions and principles as well as policy.

Suggestions

Based on all these statistics, we have the following suggestions

1. **Regular Health Check-ups:** Implement a mandatory annual or bi-annual health check-up program for all traffic police officers. This can help in early detection of health issues and prompt treatment.
2. **Physical Fitness Programs:** Introduce regular physical fitness programs tailored to the needs of traffic police officers. This could include gym facilities, yoga classes, or outdoor activities like jogging or sports to improve overall fitness levels.
3. **Nutritional Support:** Provide access to nutritious meals and snacks during shifts. Consider partnering with nutritionists to offer dietary guidance tailored to the demands of their job.
4. **Stress Management Workshops:** Organize workshops or training sessions on stress management techniques such as mindfulness, meditation, or stress-relief exercises to help officers cope with the demands of their job.
5. **Mental Health Support:** Offer access to confidential counseling services or support groups to help officers deal with job-related stress, trauma, or other mental health issues.
6. **Ergonomic Equipment:** Ensure that traffic police officers have access to ergonomic equipment such as comfortable chairs, supportive footwear, and proper gear to minimize the risk of musculoskeletal problems.
7. **Flexible Work Schedules:** Implement flexible work schedules or rotating shifts to prevent burnout and fatigue among officers. Adequate rest periods between shifts should also be considered.
8. **Education and Awareness:** Conduct regular seminars or workshops on health-related topics such as the importance of the lifestyle and health of patrolling officers.

Conclusion

The traffic police staff in Pakistan is facing multiple problems while in the workplace which is affecting their competency. These issues should be directed to the administration to design policies for improving their occupational health through health education and strengthening social support.

Participant's Consent: Written informed consent was taken from all the participants.

Ethical Approval: It was exempted from Ethical Approval as it was surveyed at Traffic Police lines.

Funding Source: No funding was required. The transportation to the Traffic Police Lines Manawan was arranged by Chughtai Lab Head Office.

Competing Interest: There is no conflict of interest to be declared.

REFERENCES

1. Granholm Valmari E, Ghazinour M, Nygren U, Gilenstam K. A systematic review of lifestyle and health among patrolling police officers. *Scand J Occup Ther.* 2023 Jul;30(5):721-744. doi: 10.1080/11038128.2022.2083013. Epub 2022 Jun 15. PMID: 35704703
2. Lentz LM, Smith-MacDonald L, Malloy D, Carleton RN, Brémault-Phillips S. Compromised conscience: A scoping review of moral injury among firefighters, paramedics, and police officers. *Front Psychol.* 2021 Mar 31;12:639781. doi: 10.3389/fpsyg.2021.639781. PMID: 33868111; PMCID: PMC8044342.
3. Sarfraz, Shahnour & Sultan, Sarwat & Latif, Humaira. (2023). Workplace Stress and Mental Health Issues among Police Personnel: Analyzing the Effects of Personal Protective Factors. *Journal of Professional & Applied Psychology.* 4. 491-500. 10.52053/jpap.v4i4.232.
4. Cojean S, Combalbert N, Taillandier-Schmitt A. Psychological and sociological factors influencing police officers' decisions to use force: A systematic literature review. *Int J Law Psychiatry.* 2020 May-Jun;70:101569. doi: 10.1016/j.ijlp.2020.101569. Epub 2020 May 16. PMID: 32482303

5. Rivera AS, Akanbi M, O'Dwyer LC, McHugh M. Shift work and long work hours and their association with chronic health conditions: A systematic review of systematic reviews with meta-analyses. *PLoS One*. 2020 Apr 2;15(4). doi: 10.1371/journal.pone.0231037. PMID: 32240254; PMCID: PMC7117719
6. Wagner SL, White N, Fyfe T, Matthews LR, Randall C, Regehr C, et al. Systematic review of posttraumatic stress disorder in police officers following routine work-related critical incident exposure. *Am J Ind Med*. 2020 Jul;63(7):600-615. doi: 10.1002/ajim.23120. Epub 2020 May 17. PMID: 32419181
7. Ricciardelli R, Carleton RN, Mooney T, Cramm H. "Playing the system": Structural factors potentiating mental health stigma, challenging awareness, and creating barriers to care for Canadian public safety personnel. *Health (London)*. 2020 May;24(3):259-278. doi: 10.1177/1363459318800167. Epub 2018 Sep 16. PMID: 32283964.
8. Carleton RN, Afifi TO, Taillieu T, Turner S, Mason JE, Ricciardelli R, et al. Assessing the relative impact of diverse stressors among public safety personnel. *Int J Environ Res Public Health*. 2020 Feb 14;17(4):1234. doi: 10.3390/ijerph17041234. PMID: 32075062; PMCID: PMC7068554.
9. Kanitha MS, Balasubramanian C, Anandan H. A study on noise-induced hearing loss of police constables. *Int J Sci Stud*. 2018; 5(11): 122-4. doi: 10.17354/ijss/2018/55
10. Butt MT, Manzoor I, Ahmad M, Shah MA. Assessment of health status of traffic constables: An occupationally exposed group in Pakistan. *J Fatima Jinnah Medical Univ*. 2020; 14(1): 19-24.
11. Bilal S, Mehmood F, Fazil M, Nasim S, Qureshi M, Ashraf M. Assessment of occupational hazards among the traffic police of rawalpindi & islamabad. *Pakistan Armed Forces Medical Journal*. 2019 Oct 23;69(5):1024-28.
12. THE POLICE HEADQUARTERS TRAFFIC UNIT'S EFFECTIVENESS IN MANAGING DRIVING PERMITS. *ijmsdh* [Internet]. 2023 Jan. 13 [cited 2024 May 26];9(01):11-6. Available from: <https://www.ijmsdh.org/index.php/ijmsdh/article/view/4>
13. Rakhmet Y. Some aspects of the administrative activity of police in road traffic safety. *Journal of Advanced Research in Law and Economics (JARLE)*. 2018;9(33):1098-103.
14. Mohamad Jamil PAS, Karuppiah K, Rasdi I, How V, Mohd Tamrin SB, Mani KKC, et al. Occupational hazard in Malaysian traffic police: special focus on air pollutants. *Rev Environ Health*. 2021 Feb 17;36(2):167-176. doi: 10.1515/reveh-2020-0107. PMID: 33594842
15. Yeasmin, S., Rahman, S., Haidar, A., Mullick, A., Hasan, M., Khan, M. A., & Khan, M. (2021, May 14). Traffic Air Pollution and Respiratory Health: A Cross-Sectional Study among Traffic Police in Dhaka City (Bangladesh). *Journal of Medical Science*, 9, 93-97.
16. Recommendation Rec.(2001)10 of the Committee of Ministers of the Member States on the European Code of Ethics of the Police [Internet]. Strasbourg: The Committee; 2001. [cited 2019 Aug 7]. Available from: <https://www.refworld.org/docid/43f5c7944.html>
17. Vera Jiménez JC, Fernandez F, Ayuso J, Lorente Acosta JA. Evaluation of the police operational tactical procedures for reducing officer injuries resulting from physical interventions in problematic arrests: The case of the Municipal Police of Cádiz (Spain). *Int J Occup Med Environ Health*. 2020 Jan 17;33(1):35-43. doi: 10.13075/ijomeh.1896.01422.
18. Mona GG, Chimbari MJ, Hongoro C. A systematic review on occupational hazards, injuries and diseases among police officers worldwide: Policy implications for the South African Police Service. *J Occup Med Toxicol*. 2019 Jan 21;14:2. doi: 10.1186/s12995-018-0221-x. PMID: 30679940; PMCID: PMC6341669.
19. Jahan I, Dalal K, Khan MAS, Mutsuddi A, Sultana S, Rashid MU, Haque MMA, Hossain MA, Hossain M, Nabi MH, Hawlader MDH. Occupational health hazards among traffic police in South Asian countries: Protocol for a scoping review. *JMIR Res Protoc*. 2023 Mar 8;12. doi: 10.2196/42239. PMID: 36884285; PMCID: PMC10034605

