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Pattern of diseases of police personnel attending outdoor department of divisional police hospital, Rajshahi

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ABSTRACT

The objective of the present study was to assess the pattern of disease of police personnel attending outdoor department at 'Divisional Police Hospital, Rajshahi, Bangladesh'. A descriptive cross-sectional study was carried out. The study was conducted in outdoor department at Divisional Police Hospital, Rajshahi from May'12 to December 2012.All police personnel who are attending outdoor department at Divisional Police Hospital, Rajshahi constituted the study population for the present study. A total of 405 samples were collected. A semi-structured questionnaire which includes both close ended and open-ended question were filled up for each patient separately. SPSS version 17 was used to analyze the data. The study revealed 62.72%medicine patients, among them 9.88% respondents were patients of gastroenteritis, 4.44% had abdominal pain, 3.70% had hypertensive, 7.40% had diabetic and rest of them had other diseases. It was found that 1.97% respondents had Gynecological problem (Leucorrhoea) 8.89% had, skin & venereal disease problem, 3.95% had allergy,1.0% had ring guard, 2.47% had hair fall and 1.48% had dandruff. About l3.83% were Orthopedics patients, among them 5.18% were osteoarthritis, 4.44% were sciatica and 2.22% had rheumatic arthritis. About 2.23% had Eye problems, 1.23% had ENT problems, 6.17% had Cardiac problems and 2.96% had Dental problems. The study provides important information to the concerned authority to take proper measures against the prevailing diseases.

Introduction

Bangladesh Police is the country's primary law enforcement organization, and it is overseen by the Ministry of Home Affairs, Government of Bangladesh. It serves a critical role in keeping peace and enforcing the rule of law throughout Bangladesh. Moreover, it also plays a vital role in the criminal justice system. Police officers are at a much higher risk than the general population for a variety of long-term physical and mental health impacts as a result of the everyday psychological pressures they face in their jobs. In a study (Goldbaum 2012)it showed that more than 25 percent of the officers had metabolic syndrome versus 18.7 percent of the general employed population. Female and male officers who reported the most stress were four and six times more likely to have poor sleep quality, respectively. Although the risk of brain cancer was only slightly higher in comparison to the general population, it was significantly increased with 30 years or more of police service. Suicide rates were more than eight times higher among active officers than among officers who had retired or left the force (Goldbaum 2012). Because of the personnel risk of exposure to confrontations and violence, as well as day-to-day involvement in a variety of traumatic incidents, police work is widely regarded as inherently stressful. As a result, this population may have a high prevalence of stress-related disorders. Increased demands of work impinging upon home life, lack of consultation and communication with the higher authorities in the organization, lack of control over workload, inadequate support have been identified as the potential factors responsible for the stress in the policemen (Collins and Gibbs 2003; Gudjonsson and Adlam 1985).

On an average policeman work twelve hours every day and often put in 36 hours at a stretch during VIP movements and festivals. Unlike other jobs, the policemen start the day with bad news. There is only negative feedback in terms of how many murders, robberies and rapes had taken place the previous night. Working throughout the day in such an atmosphere produces adverse psychological effects.

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Furthermore, long working hours, irregular eating habits, sleepless nights, shift duties, and a disrupted personnel life cause stress in police officers, making them vulnerable to various disorders (Rakesh 2003). To relieve stress, police officers frequently engage in unhealthy habits such as drinking liquor or chewing tobacco, and they suffer from a variety of negative consequences as a result. Some of them commit suicide because they are unable to cope with the stressful situation. Several studies (Franke et al. 1997; Vena et al. 1986) have found a significantly higher prevalence of stress-related disorders such as hypertension, diabetes, and coronary heart disease among police officers, and a 22-year follow-up study on Helsinki police officers discovered coronary heart disease as a major cause of mortality. Another study discovered a high prevalence of unhealthy lifestyle factors such as excessive alcohol consumption, tobacco use, and a lack of leisure time physical exercise among police officers. The present study was conducted in order to determine the pattern of disease among the policemen attending outdoor at Divisional Police Hospital, Rajshahi.

Materials and Method

A descriptive type of cross-sectional study was conducted to assess the pattern of diseases of police personnel attending outdoor department of Divisional Police, Rajshahi, Bangladesh. Duration of the study was 8 months; from May'12 to December 2012.Sample size were 405 according to the formula described in (Israel 1992). Those who gave informed consent and those who are currently serving in police department are included in the study. Mental retarded and handicapped respondents were excluded. Non-random purposive sampling method was used for sampling the population. Data collection tools were the semi-structured questionnaire. Demographic information such as Age, Gender, Marital status, Religion, Family type, educational status, Professional status, Monthly family income, Pattern of disease of the respondents, Name of the disease were included in the questionnaire. Diagnosis was confirmed with the help of basic laboratory data. The collected data was edited by checking and rechecking. The data was analyzed by using the software SPSS, MS Excel and MS Word.

Results

Regarding pattern of disease of the police personnel attending in outdoor at Divisional Police Hospital, Rajshahi, it was revealed that out of 405 respondents, among them majority (62.72%) were Medicine patients. It was found that (1.97%) respondents had Gynecological problems, (8.89%) had Skin & VD problems, (l3.83%) had Orthopedics problems, (2.23%) had Eye problems, (1.23%) had ENT problems, (6.17%) had Cardiac problems and (2.96%) had Dental problems.

Table 1: Distribution of the respondents by pattern of disease

Pattern of disease	Frequency	
	N	%
Medicine	254	62.72
Plain cut injury	15	3.7
Hernia	2	0.49
Cold and cough with fever	10	2.47
Dysentery	14	3.46
Diarrhea	8	1.97
Fever	10	2.47
Abdominal pain	18	4.44
Gastritis	18	4.44
Esophagitis	5	1.23

Ulcer	10	2.47
Migraine	8	1.97
Influenza	1	0.25
Typhoid	5	1.23
Malaria fever	2	0.49
Food poisoning	2	0.49
Gastroenteritis	40	9.88
Headache	18	4.44
Diabetic	30	7.4
Loose motion	4	0.99
Hypertension	15	3.7
Hemorrhage	6	1.48
Leukemia	4	0.99
Piles	9	2.22
Gynae	8	1.97
Leucorrhea	8	1.97
Skin & VD	36	8.89
Allergy	16	3.95
Ring guard	4	0.99
Hair fall	10	2.47
Dandruff	6	1.48
Orthopedics	56	13.83
Osteoarthritis	21	5.18
Rheumatic arthritis	9	2.22
Back pain / Sciatica	18	4.44
Traumatic injury	8	1.97
Eye	9	2.23
Conjunctivitis	9	2.22
ENT	5	1.23
Tonsillectomy	5	1.23
Cardiology	25	6.17
Heart disease	15	3.7
Chest pain	10	2.47
Dental	12	2.96
Toothache	12	2.96

It was revealed that majority (62.72%) were Medicine patients, among them (9.88%) respondents were patients of gastroenteritis, (4.44%) had abdominal pain, (3.70%) had hypertensive, (7.40%) had diabetic and rest of them had other diseases. It was found that (1.97%) respondents had Gynecological problems and it was leucorrhea, Skin & VD (8.89%), among them (3.95%) had allergy, (1.0%) had ring guard, (2.47%) had hair fall and (1.48%) had dandruff. About (13.83%) were Orthopedics patients, among them (5.18%) had

osteoarthritis, (4.44%) had sciatica and (2.22%) had rheumatic arthritis problems. About (2.23%) had Eye problems, (1.23%) had ENT problems, (6.17%) had Cardiac problems and (2.96%) had Dental problems.

Discussion

The present study has been carried out with the objective to exploring the pattern of disease of police personnel attending outdoor department of Divisional Police Hospital, Rajshahi, Bangladesh. Most of the patients were Medicine Patient (n= 254, 62.72%) among them 9.88% respondents were patients of gastroenteritis, 4.44% had abdominal pain, 7.40% had diabetes problems and rest of them had other diseases. Officers are more likely to pursue unhealthy habits, such as using tobacco, drugs, or alcohol. When compared to the general population, police officers have a higher risk of dying prematurely from these diseases (Ruiz and Morrow 2005).About (7.4%) police personnel sufferings from diabetic that indicates the prevalence of diabetes is increasing in our country. Another survey conducted in remote rural areas in Northern Bangladesh showed that the prevalence of diabetes was found to be (7.2%) (Akhter, et al. 2011). They also suffer from orthopedics (n= 56, 13.83%) due to overwork, sustained postures and long hours of duty which are highly characteristic of police service (Cho et al., 2014, Almale, 2015)

Higher amounts of driving also resulted in a higher prevalence and severity of hand and wrist pain. High rates of discomfort in the hips, buttocks, thighs, and shoulders were also observed, in addition to lower back pain. When police officers compared driving to standing for long periods of time or moving large objects, they found that driving induced lower back pain more frequently (Lane 2014). The study found 54.9% of the police officers experienced chronic lower back pain. A significant amount (76.3%) of the sample reported that they experience lower back pain within a year of working as police officer Only 8.6% of police officers had lower back difficulties prior to joining the force, leading to the conclusion that some part of policing caused the lower back pain (Brown et al. 2000). It was found that 8.89% were Skin & VD, among them 3.95% were allergy, 1.0% were ring guard, 2.47% were hair fall and 1.48% were dandruff patients. Psychological weariness, poor sleep habits, improper diets, and seldom exercise are all factors that contribute to these health issues (Ruiz and Morrow 2005).

Cardiological (n=25, 6.17%) problems were also found in significance level in our study. Another study found that overall prevalence of hypertension among the policemen was 22.50% (Rastogi, 2003). It was 37.00 percent in elder police officers 48-58 years old, with a 3.90 times higher risk of hypertension than their younger colleagues. Hypertension was not found in the younger policemen of 18-27 years of age. Alcohol use, tobacco use, overweight/obesity, and length of police employment (> 10 yrs vs. ≤ 10 years) were revealed to be potential risk factors with a substantial positive independent impact on the prevalence of hypertension among police officers, according to the study. Even in the absence of other risk factors, police officers with more than 10 years of duty had a 2.17 times higher risk of hypertension than those with less than 10 years of service (Rastogi, 2003).

Other diseases such as Gynecological (1.97%), Eye (2.23%), ENT (1.23%) and Dental (2.96%) are also found in our study. Study revealed that after retirement, the average lifespan of a law enforcement officer is two to five years. It found in this study that one third officers retired early due to existing health problems. However, it is believed that this policing job cause pre- and post-retirement problems (Ruiz and Morrow, 2005).

Conclusion

The study shows the disease pattern of the police personnel attending in outdoor at Divisional Police Hospital, Rajshahi. Different diseases prevailing in the community of which majority (62.72%) respondents were Medicine

patients followed by orthopedics (l3.83%),skin & VD (8.89%), cardiology (6.17%),were Dental patients (2.96%), Eye (2.23%), Gynecological patients (1.97%) and ENT (1.23%).

The study suggests that the police personnel should aware of the prevailing diseases in their community. The awareness should be buildup through community-based activities, and through electronic mass media, special health education, BCC, and peer education program.

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