

**NOISE INDUCED HEARING
LOSS OF KATHMANDU
VALLEY TRAFFIC POLICE :
A SELF REPORTED
OCCUPATIONAL HEALTH
STUDY**

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**NOISE INDUCED HEARING LOSS OF KATHMANDU VALLEY TRAFFIC
POLICE: A SELF-REPORTED OCCUPATIONAL HEALTH STUDY**

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INTRODUCTION

- Environmental noise levels in major cities in Nepal are well above the recommended level in many developed countries.
Joshi SK. Noise Pollution and its Health Effect in Urban Areas of Nepal. A report submitted to Nepal Health Research Council, 2003
- Automobiles are important source of noise pollution leading to adverse health effects in the cities in Nepal.
Joshi SK, Devkota S, Chamling S, Shrestha S. Environmental noise induced hearing loss in Nepal. Noise & Health 2005;7:42

INTRODUCTION

- Traffic police are the high risk group to be affected by health hazards of noise and air pollution.
Tripathi SR, Tiwari RR. Self reported hearing quality of traffic policemen. Ind J Occup Environ Med 2006;10:82-4

OBJECTIVES

- To assess the knowledge, attitude and practises of traffic police with respect to health effects caused by noise pollution

METHODOLOGY

- Questionnaire based study
- 110 traffic police who attended health examination camp at Kathmandu University TH
- Non smokers
- November 2008 to March 2009
- Ethical clearance done
- SPSS

RESULTS

BASELINE CHARACTERISTICS

Characteristics	Number (%)
Sex Composition	
Male	82 (74.6)
Female	28 (25.4)
Age (in years)	
20 – 24	45 (40.9)
25 – 29	35 (31.8)
30 – 34	22 (20.0)
35 – 39	08 (07.3)
Duration of exposure (in years)	
2 – 5	65 (59.1)
6 – 10	31 (28.2)
11 – 15	13 (11.8)
>15	01 (0.9)

PERCEPTION ON NOISE POLLUTION

Perception	Number (%)
Do you know that noise affects human health?	
Yes	103 (93.6)
No	06 (05.5)
Don't know	01 (00.9)
Do you consider noise as an occupational hazard?	
Yes	86 (78.2)
No	23 (20.9)
Don't know	01 (00.9)
Classification of present working environment	
Quiet	06 (05.5)
Tolerable	39 (35.5)
Noisy	30 (27.3)
Extremely noisy	35 (31.8)

PERCEPTION ON HEARING QUALITY

Perception	Number (%)
How is the quality of your hearing?	
Excellent	43 (39.1)
Above average	20 (18.2)
Average	34 (30.9)
Below average	13 (11.8)
How do you hear over the phone?	
Without difficulty	71 (64.5)
Do miss some conversation	22 (20.0)
Miss a lot of what is said	17 (15.5)
How do you hear in a crowd?	
Without difficulty	45 (40.9)
Do miss some conversation	37 (33.6)
Miss a lot of what is said	28 (25.5)
Do people have to talk to you louder?	
Yes	37 (33.6)
No	73 (66.4)

USE OF PPE

Perception	Number (%)
Have you ever used ear plugs or ear muffs?	
Yes	08 (07.3)
No	102 (92.7)
When do you use ear plugs or ear muffs?	
Always during duty period	02 (01.8)
Seldom	06 (05.5)
Never	102 (92.7)
Reasons for not using ear plugs or ear muffs	
Uncomfortable	15 (13.9)
Unavailable	53 (49.1)
Bad fit	07 (06.5)
Dislike	24 (22.2)
Causes headache	09 (08.3)

DISCUSSION

- Young traffic police are affected
- Though self assessed reduction in hearing loss was quoted by only 11.8% respondents, supplementary questions on hearing quality suggest higher number of cases
- Use of PPE is limited

CONCLUSION AND RECOMMENDATIONS

- Nepal needs National Standards for environmental noise levels depending upon noise area classification
- Public awareness of the hazards of noise should be aroused
- Control of Noise at source
 - Need for regular maintenance of vehicles
 - Substitution of 20 years old vehicles in the cities
 - Prohibition of pressure and hydraulic horn
 - Maintenance of roads
- Till then, PPEs should be provided to the traffic police and promote its uses

