

# NOISE LEVELS IN KARACHI ON A TRANSPORTER'S STRIKE DAY

Pages with reference to book, From 299 To 300

Shabih Zaidi ( Department of E.N.T. & Head and Neck Surgery Jinnah Postgraduate Medical Centre, Karachi. )

The level of noise pollution is constantly rising in urban Karachi. In a previous study<sup>1</sup> the author had recorded the noise levels at 99 dBA (N.P.L.), but on a transporter's strike day, there was considerable reduction in the noise level (N.P.L. 75 dBA), brought about by the absence of rickshaws and public buses.

## MATERIAL, METHODS AND RESULTS

Five sites were selected for this study, viz., (i) M.A. Jinnah Road at Tibet Centre, (2) Civic Centre, (3) Sharahe-Faisal at Nursery, (4) Nomaish and (5) The College of Physicians and Surgeons. The College of Physicians and Surgeons is a relatively quieter place located in Defence Housing Society, a planned residential area, surrounded by trees and shrubs which was taken as control. All recordings were made by the same person, using an amplified noise meter which has a built-in calibrated condenser microphone. It was guarded by a polyurethane wind screen at the times of recordings, so as to avoid the effects of wind on the recordings. All recordings were made at slow response, "A!" weighted sound level measurements which are universally acknowledged as standard notations. The recordings were made between 7-9 A.M., 10-12 Noon, and 2-4 P.M. A uniform distance of 10 meters from the noise source was observed and the noise meter kept at height of 1.5 meter above the ground level. At each site, recordings were made at 2 minute intervals and a mean value of 5 recordings was taken as a sample. During transporter's strike day, as all public transports were off the road, the traffic flow was smoother and better organized and the noise levels considerably lower, even at Tibet Centre, where the present recordings showed a minimum of 70db and a maximum of 85 db whereas, in our previous study, on a normal day, the noise levels at this site reached 180 db. during the peak traffic hours. At Nomaish, the noise levels varied between 60-80 db. which was comparatively less than the previous recordings of 100-120db on a normal day. The Civic Centre in Gulshan-e-Iqbal is an extremely busy traffic junction, where the previous study had shown noise levels of 100-140db but on this day, the recordings showed a mean of 60db. in the morning rising to 70 db. at noon and reaching its peak of 80db. between 2-4 EM. when the commuters returned home. The Nursery on Shabrahe-e-Faisal, also a busy place, showed the noise level, of 60-70db. with a smooth traffic flow. At the College of Physicians and Surgeons, the levels were 55 db. in the morning, reaching the peak at 80db. at 12.00 noon, when there was maximum movement, and falling to a level of 60db. around 4 EM. These findings were not much different from our previous recordings (Table).

**TABLE**

Area	Time		
	7.00-9.00A.M.	10-12Noon	2-4P.M.
Civic Centre	60db	70	80
Nomaish	60db	70	80
Tibet Centre	70db	80	85
Nursery	60db	70	70
College	55db	80	60

## DISCUSSION

The harmful effects of noise have been elaborated by many workers and accepted as a major hazard by W.H.O. <sup>2</sup>. The most significant loss is of the sensorinural hearing, <sup>3,4</sup> which is usually permanent. Temporary threshold shift has been described by some workers in people exposed to loud noise for shorter duration <sup>5,6</sup>. Such hearing losses are gross and permanent <sup>7-9</sup>. Tinnitus could be an accompanying feature and a great source of misery to the sufferers. The effects on the cardiovascular <sup>9</sup> and nervous system <sup>10</sup>, psyche <sup>11</sup> and physical state <sup>12</sup> have been elaborated elsewhere, and do not require further emphasis. The present study showed a significant reduction in the noise levels as compared to our previous study <sup>2</sup>. The reduction on this day of strike was mainly due to the absence of heavy transport, public buses, particularly rickshaws which are the established means of excessive noise in Karachi <sup>13</sup>. The relative quietness of Karachi on transporter's strike day leads to two evident conclusions, (i) The Leq (db A) levels of noise in Karachi fell from 99 db(A) on a normal day to 75 db (A) on transporter's strike day, showing significant difference (P < 0.05). The sources of unbearable noise in Karachi are public buses, rickshaws, trucks, and lorries, which significantly aggravate the noise from 70-80 db (A) to 120- 150 db (A) P(c 0.05).

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