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WHY DO WE LIKE NOISE?

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We, the “hearing conservationists,” are sick and tired of repeating that noise is bad for your hearing. We even have nightmarish dreams of those tiny hair cells, dying by the thousands from been shaken by the basilar membrane that is moving wildly up and down under the action of the tympanic membrane, the oscicles, etc, etc, etc.

We make presentations and write articles about the effects of noise. We use to play back fragments of music or speech that mimic the perception of signals by hard of hearing people. We do that in

front of attentive audiences, so that every one can realize how the hearing deteriorates when exposed to loud noises and how terrible it sounds to the listener.

In summary, we do have enough material to convince all of humanity that hearing is precious and is worth conserving. Right? No, wrong! We do have the material, but it appears that it is not good enough to drive the message home.



Examples? Well they are thousands. Let's start with our every day's life experience on the road. How about motorcycles driving without mufflers? Have we had enough of them? Then we have cars, trucks and buses with the same problem. We even have hordes of acoustical engineers at car factories, "muscling" (not controlling) the noise that cars make, so they can sound as big and as powerful as racing cars. There is no acoustical or even noise control conference without one or more sessions on how to achieve this "musical" noise.

How about restaurants and public places? In how many of them you can maintain a decent conversation without yelling? To make things even worse, many eating places will help the cacophony by adding some music, live or amplified.

In summary, we are bombarded with noise, generated not only by teenagers for teenagers, but by people of all ages.

The issue is that we, the hearing conservationists, are left to preach to the converted: other colleagues, hearing conservationists, safety officers and health professionals.

What about research, standards and enforcement? Well, the list of research facilities independent or part of Universities is quite large as is the roster of distinguished professionals involved in their activities. National and international institutions provide standards regarding noise assessment, measurement instruments and measuring techniques. Different agencies deal with enforcement of law and regulations. In summary, the infrastructure for dealing with hazardous and annoying noise is there to be applied.

Where we have done a pretty good job in controlling the noise exposure is in the workplace. We have developed excellent hearing conservation programs. We have safety officers trained in measuring and assessing the hearing hazard. Large signs advise workers and visitors alike of where to wear hearing protectors and these signs hang prominently at the entrance of the hazardous areas. An army of audiologists, audiometric technicians and nurses control periodically workers' hearing

and advice on how to conserve it. Periodic training sessions reinforce the basic principles and every one is happy. We even insist in the fact that noise is noise independently if it is at work, at leisure or at recreation. Finally, Hearing Conservation Programs have provisions for what to do with workers who insist on endangering their hearing.

So, where have we gone wrong? Is it inherent to human nature to enjoy noise? Todd and Coddy claim precisely that.[1,2] Probably their theory, of a physiological basis for enjoying noise is worth exploring further. Is there also a psychological reason that could explain why we have failed to convince people that “noise is bad for your health”?

We know that noise is not the only fatal attraction. There is smoking and other drugs; there is fat food and many other things that are known to be “bad” and are used extensively. Obviously, the education is important, but not sufficient.

We have to find the reason why people love noise and do something about it. Only then we will be able to orient our efforts and become real hearing conservationists!

References

1. Neil T and Frederick C: Vestibular responses to loud dance music: A physiological basis of the ‘‘rock and roll threshold’’? J. Audio Eng Soc 1995;43(4):251–66.
2. Neil T. Evidence for a behavioral significance of saccular acoustic sensitivity in humans. J Acoust Soc Am 2001;110(1).