

Fund has, quite rightly, changed more rapidly as time has passed with equally dedicated and able helmsmen and crew. The need for the Fund continues. Please, don't forget the Ben Fund!

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Occupational health

Ear protection for dental practitioners

Sir, recent research into hearing loss, hearing aids, and dementia¹ has concluded that people with hearing loss have a 20% higher risk of developing dementia than people with no hearing loss. This is reduced to 6% if hearing aids are worn. This link intensifies the need for dentists to consider and manage the risk to themselves, and to their staff.

The association between the use of the air rotor handpiece and hearing loss is well researched and documented^{2,3,4} with

dentists using this equipment suffering twice the incidence of hearing loss and tinnitus compared to the general population. The association was noted even among dental students after as little as 15 minutes' exposure.⁵

The air rotor handpiece operates with noise levels reportedly between 70 and 82 dBA, with peaks up to 105 dBA. The Control of Noise at Work Regulations 2005⁶ sets action by employers at certain noise exposure levels. These include risk assessments, provision of hearing protection, and health surveillance, including hearing tests.

A quick scan through advice and guidance given relating to PPE shows a heavy influence from the COVID pandemic, a concentration on prevention of cross infection and protection of eyes and skin, and a total absence of reference to noise levels and hearing impairment, for example *Practice Support Manual*.⁷

Ear protection devices (EPDs) range from the simple cotton wool ear plug, to devices which block certain levels of noise or certain sounds and allow normal conversation.

Should guidance now be reviewed to include specific reference to the risk of

hearing loss and subsequent dementia, and to the responsibility of employers to protect their staff?

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