

## **Effectiveness in Occupational Health Services Management of Audiometry data using Semi artificial Intelligent (AI) Technology**

**Rohazzuan Abdul Azit, Shawaluddin Husin**

MySmartOH, Malaysia

**Corresponding Author:** Rohazzuan Abdul Azit; [rohazzuan@kpoc.com.my](mailto:rohazzuan@kpoc.com.my)

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### **ABSTRACT**

**Objective:** Lack of awareness about NIHL among employers, employees, and health care professionals is one of the main barriers for the prevention of NIHL in the world. One in four people across the world — nearly 2.5 billion — could face some degree of hearing loss by 2050 with at least 700 million requiring access to treatment and rehabilitation, a WHO report warns. **Method:** This is a descriptive article explaining about a newly developed management system using semi artificial intelligent (AI) Technology. **Result:** The role of mandatory audiometry screening in the noise regulation at workplace with significant noise exposure level and how it would minimise the impact of hearing loss via early preventive intervention and optimization by converting the manual audiometry data calculation to algorithm using semi -AI technology approach. Semi AI analysis on raw audiometry data for result, conclusion and recommendation in individual & group report, dynamic dashboard for employer, auto notification to individual employee and annual summary report to authority. With faster report interpretation, early intervention can be done, easier monitoring for the employer, allow review risk management of program such as health risk assessment and hearing conservation program more efficient and effective. **Conclusion:** As the information technology progresses, the occupational health and OSH professionals should utilize the technology to simplify the analysis and recommendation from audiometry screening as part of effective intervention part for faster and better preventive outcome.

**Keywords:** Occupational Health Services, Management of audiometry data, Semi-artificial intelligence

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