

## Correspondences

### \*Letter to the Editor

#### Rising Trend of Workplace Oral Health Examination

Dear Editor

Shimazaki *et al.* analyzed oral health examination findings for 4,484 male and female employees aged 35 to 74 in relation to past participation in oral health examinations reported in a questionnaire<sup>1)</sup> and concluded that workplace oral health examination accompanied by oral health instruction may be effective for maintenance of periodontal health. We think this is an important publication; however, the following issues need to be addressed.

Firstly, the job profile of the employees at the workplace (company) where oral health examination was carried out needs to be mentioned. The information is paramount to understanding whether the work directly or indirectly affected oral health of the employee<sup>2, 3)</sup>.

Secondly, interexaminer reliability should have been calculated for the dentists performing the periodontal examination and dental hygienists delivering the oral health instructions<sup>4)</sup>.

The glaring difference between employees undergoing workplace oral health examination (36.8%) and workplace general health examination needs to be significantly narrowed. It has been reported previously that the role of home dentists is not preventive oriented; hence, it is necessary to provide regular oral health examination and health promotion programs for the adult population in the workplace in Japan.

Also, in conformity to the present study, an oral health awareness campaign was carried out in four workplaces in north-east London in which gingival bleeding on probing (BOP) and probing depths (PD) were measured using a controlled pressure probe<sup>5)</sup>.

The results showed the mean percentage of sites probing 4 mm and above per subject reduced from 38 to 25% in the test group. This confirmed the clinical effectiveness of a workplace-based oral health awareness campaign. Hence, the dissemination of the idea of workplace oral

health examination including oral health instruction may affect oral health beneficially and enhance oral health quality of life.

Thanking you.

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### References

- 1) Oshikohji T, Shimazaki Y, Shinagawa T, et al. Relationship between receiving a workplace oral health examination including oral health instruction and oral health status in the Japanese adult population. J Occup Health 2011; 53: 222–9.
- 2) Suyama Y, Takaku S, Okawa Y, Matsukubo T. Dental erosion in workers exposed to sulfuric acid in lead storage battery manufacturing facility. Bull Tokyo Dent Coll 2010; 51: 77–83.
- 3) Vianna MI, Santana VS, McKelvey W. Periodontal health and oral mucosal lesions as related to occupational exposure to acid mists. Community Dent Oral Epidemiol 2005; 33: 341–8.
- 4) Murano M, Kawaguchi Y, Shinada K, Araki K, Mataka S, Kurosaki N. Study on oral health status and health behavior of workers at government office. Kokubyo Gakkai Zasshi 1999; 66: 283–91.
- 5) Fishwick MR, Ashley FP, Wilson RF. Can a workplace preventive programme affect periodontal health? Br Dent J 1998 Mar 28; 184: 290–3.

### \*\*The author reply

I would like to thank Dr. Priya<sup>1)</sup> for raising some points regarding our recent paper<sup>2)</sup>.

The worksite oral examinations were provided by the company to the workers who handled hazardous substances such as acids, hydrogen fluoride and white phosphorus in the workplace because the Occupational Safety and Health Act of Japan requires them to be provided periodically by

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the employer. The examinations were also provided to other workers as an optional health-maintaining service by the health insurance society of the company. The company used in our study was a large electronics firm that owns many smaller subsidiary companies, and the health insurance society covers all the workers, including white collar workers, system engineers and manual laborers. Accordingly, the study subjects were not limited to a specific job profile. The cost of both types of oral health examination was covered by the health insurance society of the company. In our study, the subjects who received the optional oral health examination were examined. Therefore, it would appear that the percentage of participants who received the oral health examination in this study voluntarily among the subjects who received it as required by law accounted for just a fraction of the subjects, but we could not determine the exact percentage.

In the study, dentists trained to perform oral health status inspections carried out the periodontal examinations. The interexaminer reliability of the periodontal checkup was verified before conducting the oral health tests; the weighted kappa value was  $>0.58$ , which indicated moderate agreement. Since 2003, four dental hygienists have been involved in giving the oral health instructions after the oral health inspection. As a general rule, only one dental hygienist gave the instructions in any one year, although we could not verify the consistency of the instructions.

As Dr. Priya stated, we also think that popularizing

workplace oral health examinations that include oral health instruction is very important for ensuring the oral well-being of employees. There are two issues regarding this point. First, in our study, only about one-third of the subjects who underwent the general health checkup desired the oral health examination in 2008. Increasing the participation rate of oral health examinations in a workplace in which oral health examination has already been provided is important. Second, many workplaces in Japan do not employ professionals to conduct such examinations. Therefore, increasing the number of workplaces that conduct oral health inspections is another challenge. In view of these issues, it is important to accumulate more evidence that evaluates workplace oral health examinations and oral health instructions in relation to their contribution to improving the oral health of workers.

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## References

- 1) Priya H, Kumar M. Rising trend of workplace oral health examination. *J Occup Health* 2011; 53: 393.
- 2) Oshikohji T, Shimazaki Y, Shinagawa T, et al. Relationship between receiving a workplace oral health examination including oral health instruction and oral health status in the Japanese adult population. *J Occup Health* 2011; 53: 222–9.