

## **Supplementary Material**

### **Analysis of implementation status and influencing factors of Standard Infection**

### **Control Methods for dental environmental surfaces by Dental Hygienists in Korea**

#### **:a questionnaire-based study**

Hye-Young Yoon<sup>1,2,3</sup>, Sun-Jung Shin<sup>1,2,3</sup>, Bo-Mi Shin<sup>1,2,3</sup>, Hyo-Jin Lee<sup>1,2,3</sup>,

Jin-Sun Choi<sup>1,2,3</sup>, Kyoung-Nam Kim<sup>1</sup>, Soo-Myoung Bae<sup>1,2,3†</sup>

<sup>1</sup>Department of Dental Hygiene, College of Dentistry, Gangneung-Wonju National University,  
Gangneung, Republic of Korea

<sup>2</sup>Research Institute of Oral Science, Gangneung-Wonju National University, Gangneung,  
Republic of Korea

<sup>3</sup> Research Institute of Dental Hygiene Science, Gangneung-Wonju National University,  
Gangneung, Republic of Korea

<sup>†</sup> Correspondence to: Soo-Myoung Bae, E-mail: [edelweiss@gwnu.ac.kr](mailto:edelweiss@gwnu.ac.kr)

## **Supplementary Text S1. Questionnaire**

*(Convert the content below into a Google Form format to conduct the survey)*

### **Section 1. Questions Regarding General Characteristics**

1. What is your gender?

Female       Male

2. What is your age? (e.g., 25 years old, etc.) \_\_\_\_\_

3. What is your total work experience? (e.g., 1 year, 1 year and 6 months, etc.) \_\_\_\_\_

4. What is your working area?

Seoul     Gyeonggi-do     Gangwon-do     Chungcheong-do     Gyeongsang-do  
 Jeolla-do     Jeju-do

5. What type of dental institution is yours?

Hospital (e.g., University hospitals, General hospitals, Dental hospitals)  
 Clinic

6. What is the average daily number of patients at your dental institution?

19 or fewer     20~29     30~39     40 or more

7. How many staff members (including dentists, dental hygienists, dental technicians, nursing assistants, etc.) are employed at your dental institution?

(e.g., 4 people, etc.) \_\_\_\_\_

8. Does your dental institution have an infection control personnel?

Yes       No

**Section 2. Questions Regarding Infection Control Methods for 'Clinical Contact Surfaces'**

9. Please select all methods for surface management of your dental institution's 'Bracket table'.



Surface  $\Rightarrow$

*(When selecting this option, the response to Question 9-1.)*

9-1. Please select all timing for performing 'surface barriers'.

- After each patient
- Before the start of all treatments
- After the end of all treatments
- When contamination is visible
- After treatment of specific patients (e.g., those with severe bleeding, patients with blood-borne infectious diseases, etc.)
- Sometimes

Disinfection  $\Rightarrow$

*(When selecting this option, the response to Question 9-2~4.)*

9-2. Please select all disinfection methods.

- Wipe with alcohol swabs, disinfectant wipes, or similar products.
- Spray the disinfectant.
- Spray the disinfectant, wipe with a towel, then spray again to finish.
- Don't know
- Other ( )

9-3. Please select all disinfectant components.

- Sodium hypochlorite
- Alcohol
- Hydrogen peroxide
- Don't know
- Other ( )

9-4. Please select all timing for performing disinfection.

- After each patient
- Before the start of all treatments
- After the end of all treatments
- When contamination is visible
- After treatment of specific patients (e.g., those with severe bleeding, patients with blood-borne infectious diseases, etc.)
- Sometimes

Cleaning

⇒

*(When selecting this option, the response to Question 9-5.)*

9-5. Please select all timing for performing cleaning.

- After each patient
- Before the start of all treatments
- After the end of all treatments
- When contamination is visible
- After treatment of specific patients (e.g., those with severe bleeding, patients with blood-borne infectious diseases, etc.)
- Sometimes

Not performed surface control

Other ( )

9-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

10. Please select all methods for surface management of your dental institution's 'Unit chair control switch'.



- Surface barriers ⇒ *When selecting this option, the response to Question 10-1 (Same as Question 9-1.).*
- Disinfection ⇒ *When selecting this option, the response to Question 10-2~4 (Same as Question 9-2~4.).*
- Cleaning ⇒ *When selecting this option, the response to Question 10-5 (Same as Question 9-5.).*
- Not performed surface control
- Other ( )

10-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs

- To save time
- Other ( )

11. Please select all methods for surface management of your dental institution's 'Light handle'.



- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 11-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 11-2~4 (Same as Question 9-2~4.).
- Cleaning  $\Rightarrow$  When selecting this option, the response to Question 11-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

11-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

12. Please select all methods for surface management of your dental institution's 'Unit chair headrest'.



- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 12-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 12-2~4 (Same as Question 9-2~4.).

- Cleaning ⇒ When selecting this option, the response to Question 12-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

12-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

13. Please select all methods for surface management of your dental institution's 'Drawer handle'.



- Surface barriers ⇒ When selecting this option, the response to Question 13-1 (Same as Question 9-1.).
- Disinfection ⇒ When selecting this option, the response to Question 13-2~4 (Same as Question 9-2~4.).
- Cleaning ⇒ When selecting this option, the response to Question 13-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

13-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

14. Please select all methods for surface management of your dental institution's 'Light-curing unit head'.



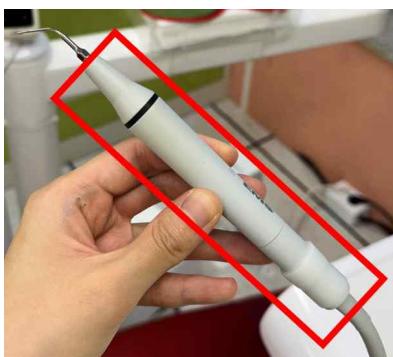
- Surface barriers ⇒ When selecting this option, the response to Question 14-1 (Same as Question 9-1.).
- Disinfection ⇒ When selecting this option, the response to Question 14-2~4 (Same as Question 9-2~4.).
- Cleaning ⇒ When selecting this option, the response to Question 14-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

14-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

15. Please select all methods for surface management of your dental institution's 'Scaler body'.



- Surface barriers ⇒ When selecting this option, the response to Question 15-1 (Same as Question 9-1.).
- Disinfection ⇒ When selecting this option, the response to Question 15-2~4 (Same as Question 9-2~4.).
- Cleaning ⇒ When selecting this option, the response to Question 15-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

15-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations

- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

16. Please select all methods for surface management of your dental institution's '3-way syringe handle'.



- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 16-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 16-2~4 (Same as Question 9-2~4.).
- Cleaning  $\Rightarrow$  When selecting this option, the response to Question 16-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

16-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

17. Please select all methods for surface management of your dental institution's 'Computer mouse'.



- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 17-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 17-2~4 (Same as Question 9-2~4.).

- Cleaning  $\Rightarrow$  When selecting this option, the response to Question 17-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

17-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

### **Section 3. Questions Regarding Infection Control Methods for 'Housekeeping Surfaces'**

18. Please select all methods for surface management of your dental institution's 'Wall'.

- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 18-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 18-2~4 (Same as Question 9-2~4.).
- Cleaning  $\Rightarrow$  When selecting this option, the response to Question 18-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

18-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

19. Please select all methods for surface management of your dental institution's 'Floor'.

- Surface barriers  $\Rightarrow$  When selecting this option, the response to Question 19-1 (Same as Question 9-1.).
- Disinfection  $\Rightarrow$  When selecting this option, the response to Question 19-2~4 (Same as Question 9-2~4.).
- Cleaning  $\Rightarrow$  When selecting this option, the response to Question 19-5 (Same as Question 9-5.).
- Not performed surface control
- Other ( )

19-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )

20. Please select all methods for surface management of your dental institution's 'Window'.

- Surface barriers ⇒ *When selecting this option, the response to Question 20-1 (Same as Question 9-1.).*
- Disinfection ⇒ *When selecting this option, the response to Question 20-2~4 (Same as Question 9-2~4).*
- Cleaning ⇒ *When selecting this option, the response to Question 20-5 (Same as Question 9-5).*
- Not performed surface control
- Other ( )

20-6. Why do you perform surface management using the above method?

(Multiple selections allowed)

- Based on information obtained from external organizations
- According to the institution's internal guidelines
- To reduce costs
- To save time
- Other ( )