

# Oral hygiene mainetennance of dementia patients by care workers

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## Introduction

Dementia is a complex clinical syndrome characterized by a decline in memory, verbal ability, executional ability, as well as of cognition of time and space that causes disability through abnormal behaviors, changes in personality, and loss of emotional functions. Dementia requires long-term care and not only compromises patient’s quality of life but also places a burden on families and caregivers, both psychologically and financially. Hence, dementia is a social issue rather than just an individual problem. Poor oral health is one of the many important issues faced by dementia patients.

## Objective(s)

Dementia is a disease that involves partial loss of brain or mental function (i.e. judgment, memory, emotion, calculations, etc.) leading to reduced functionality of daily and social activities, and consequently the patients require long-term care and management. This study assesses the status and issues of oral hygiene maintenance of dementia patients by care workers, in order to produce foundational data for development of oral hygiene intervention program for dementia patients.

## Method(s)

In order to ethically protect the subjects, this study was conducted under the approval of the S University Bioethics Review Board (IRB approval number: SHIRB-201804-HR-061-02).

In March 2019, we performed a convenience sampling of 10 care workers who are taking care of dementia patients in Korea, and performed a focus group interview on these workers. To recruit study participants, the investigator contacted a nursing facility for seniors and home care aid institution in the metropolitan area in Korea to explain about the purpose of this study and ask for cooperation. Care workers working in these two facilities that consented to participate were recommended for our focus group interview. Seven care workers in the nursing facility for seniors and three care workers in the home care aid institution were enrolled.

## Results

### 1) Characteristics of caregivers

The basic characteristics of caregivers are outlined in <Table 1>.

The caregivers group consisted of 10 female caregivers including 7 from senior nursing homes and 3 from in-home senior care agencies. The participating caregivers were between 49 and 68 years of age, with work experience as a caregiver ranging from 3 years and 8 months to 12 years and 8 months. All participating caregivers were female.

Table 1. Characteristics of caregivers

No	Gender	Age	Facility Type	Years of Experience
1	Female	61	Skilled Nursing Facility	8 years 10 months
2	Female	52	Skilled Nursing Facility	14 years
3	Female	54	Skilled Nursing Facility	16 years
4	Female	49	Skilled Nursing Facility	3 years 8 months
5	Female	56	Skilled Nursing Facility	7 years 3 months
6	Female	68	Skilled Nursing Facility	11 years 8 months
7	Female	58	Skilled Nursing Facility	6 years 8 months
8	Female	56	Home Care Arrangement	10 years
9	Female	53	Home Care Arrangement	10 years 5 months
10	Female	61	Home Care Arrangement	12 years 8 months

### 2. Derived topics related to present conditions and problems of oral health care of senior citizens with dementia

Derived topics related to the current state and issues of oral health care in senior citizens with dementia are outlined in <Table 2>. There were 46 meaning-makings extracted from the raw data, from which 28 topics have been derived. From the list of derived topics, 8 collections of topics have been further derived, which have been organized into 3 derived categories through systematic conceptualization. The three categories for caregivers included characteristics of senior citizens with dementia, oral health care in senior citizens with dementia, and education on oral health care.

Table 2. Derived topics related to present conditions and problems of oral health care of senior citizens with dementia

Category	Central Theme	Topic
Characterist ics of senile dementia patients	Challenges due to the characteristics of senile dementia patients	• Senile dementia patients’ ability to perform day-to-day activities by level of care
		• Managing problematic behaviors of senile dementia patients
		• Patient response to application of dementia intervention programs
	Applicability of intervention programs	• Patients’ level of care with a high degree of expected effectiveness after education
		• Effects of applying programs to bedridden patients
		• Availability of applying whole body exercise or oral exercise
Oral health care of senile dementia patients	Variability across facilities	• Implementation status of in-house dementia prevention education for nursing home patients
		• Ideas of oral health care by different stages of dementia
		• Differences between nursing homes and nursing hospitals
	Poor health condition of senile dementia patients	• Differences between facility-based and home-visiting programs
		• Senile dementia patient’s ability to brush teeth by themselves
		• Dry mouth symptoms of senile dementia patients
Oral health care education	Difficulty in the oral health care of senile dementia patients	• Number of meals of senile dementia patients
		• Sugary snack intake of senile dementia patients
		• Denture care status of senile dementia patients
	Issues in oral health care education	• Responding to oral health problems of senile dementia patients
		• Responding to dry mouth symptoms of senile dementia patients
		• Time spent on managing oral health care of senile dementia patients
	Desire to receive oral health care education and related information	• Difficulties managing oral health care of senile dementia patients
		• Needs of oral health care workers
		• Implementing oral health care education for care workers
	Desire to access information more easily	• Integrating oral health care education into continuing education curriculum
		• Oral hygiene guidelines for oral health care of senile dementia patients
		• Desired contents regarding oral health care of senile dementia patients

### 3. Semantic description of the current state and issues of oral health care in senior citizens with dementia

#### 1) Topic 1. Characteristics of senior citizens with dementia

When the characteristics of patients under long-term senior care were investigated, the patients in Class III or higher exhibited partial cognitive functions and intact physical functions (i.e. body movement). These findings indicated that the education or programs on oral health care can be applied to these patients.

“Patients in Class I or II have minimal cognitive functions and physical abilities. Meanwhile, patients in Class III can move around with a little bit of assistance. Patients in Class IV or V have early-stage dementia, and therefore have minimal issues on physical movement. However, they are very temperamental, so that it is difficult to take care of them. When they show impulsive response, we need to please them and be sympathetic until they become stable again.”

“I feel that they understand what would be beneficial for their health, despite having dementia. So there will be minimal negative response when they are asked to participate in any sort of helpful program. In my opinion, most of the patients in Class III-V will enjoy new programs from outside.”

#### 2) Topic 2. Oral health care in senior citizens with dementia

Senior citizens from different classes exhibited varying degrees of abilities to maintain oral health and brush their teeth. The caregivers were experiencing several issues with oral health care in senior citizens with dementia, and demanding professional assistance.

“If we see an oral health-related issue, we speak to the director or manager in order for further discussion with the legal guardian or family caregiver of the patient. Other health-related issues can be managed directly in the center by nurses, but oral health is something that cannot be managed by nurses and we often discuss with the family members or legal guardians. Some patients receive immediate treatments while some do not, based on economic status or mindset of their guardians.”

“I think an establishment of oral health management system for senior citizens would benefit both the patients and us caregivers. It would be great to have a program focusing on oral health management for bedridden patients, while the patients who can move around would benefit from a program that involves fun physical activities or body movements.”

#### (3) Topic 3. Current state of education on oral health care

It was found that the education on oral health care of patients was not properly provided during the training sessions for caregivers, and the majority of caregivers were demanding appropriate level of education on oral health care. Moreover, they were hoping for more useful educational material (i.e. related video clips or manuals) to be provided.

“Although it would be best to have a specialist to check the patients’ oral health, we are the ones helping in their daily lives. I think we would benefit from education on oral health care for senior citizens. This also should be a part of training course required for obtaining the caregiver certification. For us – who are already a trained caregiver – this should be provided during our refresher trainings.”

“The location of training should not matter. We hope that this training would be consistently provided, not just a one-time session, so that we can continuously check our knowledge.”

## Discussion

For the careworkers of senior citizens with dementia, it is important to fully understand the characteristics of elderly dementia patients. Therefore, relevant information or training sessions should be provided for the family caregivers, so that they can understand the characteristics of dementia patients, communicate with the patients, and understand how to deal with abnormal behaviors. In addition, a nationwide system enforcing the oral health specialists to provide regular oral health management service for senior dementia citizens needs to be established and supported by the government. Lastly, standardized manuals and information for general people – who are not experts in oral health management – should be developed and distributed.

## Conclusion

A simple, easy-to-understand manual describing the process of oral hygiene maintenance for care workers of dementia patients should be developed and distributed. In addition, oral hygiene of dementia patients should be regularly assessed and managed by a professional of oral health management.

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