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## Oral care perspectives of professionals in nursing homes for the elderly

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**Abstract:** *Objectives:* Good oral health is an important aspect of quality of life. However, a number of studies have shown that oral care for the dependent elderly is unsatisfactory. The aim was to explore in nursing homes for the elderly what professionals with different responsibilities may consider as being important aspects of well-functioning daily oral care. *Methods:* A total of 23 informants from three municipalities in the region of Värmland, Sweden, were interviewed. An interview guide was used, containing some demographic and open-ended questions about individual perceptions of issues according to the study aim. The interviews were tape-recorded and transcribed verbatim. *Results:* In the manifest and latent analyses, six categories and three themes emerged. The categories were Key Processes, Communication, Priorities, Competence, Good Oral Health and Autonomy. The themes were Organization, Staff Approach and Staff's Views on Residents' Needs. An overall picture emerged that oral care, rather than occupying an integral position, played a peripheral role in nursing care. *Conclusions:* To improve oral care, there are opportunities to work with existing structures and clarify responsibilities and key processes. Oral care should be included in nursing work as a more highly prioritized task, and nurses' knowledge needs to be enhanced. A network of activities at all levels is needed to implement oral care in nursing care.

**Key words:** dental care; dental hygienist; long-term care; nursing assistant; nursing home; oral hygiene; qualitative research; routines

## Introduction

Good oral health is an important aspect of quality of life, even for the elderly (1). Teeth are important for chewing, speech and appearance (2–4). In recent years, people's overall health in Sweden has improved, as is reflected in an increase in the average life expectancy (5). Today, the elderly remain dentate to a greater extent than just a few decades ago and have more teeth left, often with extensive repairs, crown and bridge work and implants. This places high demands on satisfactory oral care, for the elderly to remain in good oral health. Oral health is also affected by a number of general health factors. Dementia and various mental and physical disabilities, for example, may result in difficulties in maintaining good oral health. Medication may induce hyposalivation, which, in turn, increases the risk of tooth decay and other dental diseases (6, 7). With a lack of support for regular oral hygiene habits, there is a risk that dependent residents will develop oral diseases.

### Dates:

Accepted 30 November 2012

### To cite this article:

*Int J Dent Hygiene* 11, 2013; 298–305.  
DOI: 10.1111/ijdh.12016

Lindqvist L, Seleskog B, Wårdh I, von  
Bültzingslöwen I. Oral care perspectives of  
professionals in nursing homes for the elderly.

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The concept of care involves not only caring for the sick, but also taking preventive measures to preserve good overall health. In Sweden, daily oral care for the dependent elderly who cannot manage it themselves is expected to be performed by healthcare professionals, pursuant to the Social Services Act (8). Furthermore, an essential element of the Dental Health Act, revised in 1999, is that elderly people in need of extensive supportive care from the municipality are entitled to one free in-home oral health assessment by dental staff every year whether in their personal residence or in an institution. Eligibility for this service is based on the level of supportive care for daily living required by the individual. Also, the nurses and nursing assistants are offered oral health care education (9).

Despite these stipulated services, several studies have shown that knowledge about and performance of oral care for the dependent elderly is often unsatisfactory (10, 11). An understanding of the implications of nursing assistants' perceptions, values and knowledge of oral care has been pointed out as important for new strategies for improving oral health and daily oral care at long-term-care facilities (12). The aim of this study was to explore in nursing homes for the elderly what professionals with different responsibilities may consider as being important aspects of well-functioning daily oral care.

## Study population and methodology

### Design

The study had a qualitative design, with data collection through individual interviews. A content analysis with both manifest and latent analyses was performed (13).

### Sample selection

Before the start of the study, one of the authors (IvB) contacted the Director of Social Services in each of three municipalities in the region of Värmland in Sweden. One large, one medium and one small municipality, defined by the investigators and based on the numbers of inhabitants (26 000, 8600 and 1100 respectively), were selected. A nursing home in each municipality was contacted after consultation with the Social Services Director, to recruit different professionals in elderly care for interviews. All interviews were performed by two of the authors (LL and BS). The sample of informants could be described as a type of snowball recruitment, a term from the tradition of grounded theory (14). The data collection started with interviews of the four care managers of the three selected facilities. At their request, two of the four care managers were interviewed together as they worked at the same facility. The interviewers then continued with five registered nurses, three of whom were the medically responsible nurses (MAS) in the three municipalities. One of the other two nurses was recommended by the MAS in that municipality, and the other was chosen by the interviewers, as was the case manager. The four care managers recommended the 13 interviewed nursing assistants.

At a nursing home, the care manager has the overall operating responsibility for care, personnel and finances and often has a social science education from a university, but in some cases, he or she may have a more nursing-oriented educational background. The MAS are registered nurses, but are not involved in everyday care of the residents. Instead, they have the overall medical responsibility and assure the quality of care at the nursing homes in a municipality. Registered nurses (not MAS) have everyday responsibilities for health care. Nursing assistants are undergraduate staff. They work closest to the dependent elderly on an everyday basis and perform the daily care. The case manager is the social worker who, in dialogue with the dependent individual, the closest relatives and nursing personnel, establishes the level of personal care that is needed.

One of the 23 informants was a man, and the rest were women. The mean age was 52 years, range 32–65 years. The average length of professional experience for the care managers was 11 years, for the MAS 11 years, for the registered nurses 13 years and for the nursing assistants 17 years. The case manager had 13 years of professional experience.

### Prestudy preparation

A pilot interview was conducted with an informant outside the main study, to test the interview guide, which then was modified slightly to generate more comprehensive answers. Study visits to two nursing homes were also conducted by the two interviewers, both dental hygienists, to get a contextual orientation and to increase their understanding of the conditions in nursing homes.

### Data collection and analysis

The interview guide had two sections: the first part required descriptive answers about the respondent's age, sex, profession and length of professional experience. The second part contained open-ended questions about the individual's perceptions of issues, in accordance with the study aim. The questions were structured both regarding content and order, but were open-ended to allow for the respondents' own choice of words and for follow-up questions by the interviewers. The interviews were performed at each interview subject's working place. When one author performed an interview, the other author listened and vice versa. The interviews lasted 35–55 min and were tape-recorded. The interviews were transcribed verbatim by a secretary. The interviewers successively read the data material during the study period and reflected on each interview. After saturation had been reached, a qualitative content analysis followed in which all four authors participated (13). First, a manifest analysis was made to capture the perceptions expressed in the data material. The two interviewers made an initial analysis, which was then discussed in depth by all four authors. A manifest analysis answers the questions 'what' and describes what the respondents actually talked about. The material fell into a number of categories.

Finally a latent analysis, which answers the question ‘how’ and constitutes the interpretative part of the analysis, was performed to find themes that explained the categories.

## Ethics

The Regional Ethical Review Board in Uppsala approved the study. Information about the study aim was given in contact with the Director of Social Services in each municipality. All informants agreed to participate in the study. Each interview began with oral and written information about the study, and the informants were guaranteed confidentiality.

## Results

From the data material, six specific categories of important aspects of well-functioning daily oral care emerged. These were Key Processes, Communication, Priorities, Competence, Good Oral Health and Autonomy. In the latent analysis, three themes emerged: Organization, Staff Approach and Staff's Views on Residents' Needs (Table 1). The following text presents categories and themes with illustrative quotes from the data.

### Organization

Under the theme Organization, two categories emerged: Key Processes (including structure and support resources) and Communication among staff.

### Key Processes

Several informants pointed out that Swedish elderly care is governed by both the Swedish Health Care Act (HSL) and the Social Services Act (SoL).

*... in the electronic patient records we can see what work has been done on each resident pursuant both to The Health Care Act and The Social Services Act ...* (Registered nurse)

Informants described that there are defined support resources and different levels of responsibility, to ensure the general nursing care of the individual residents. However, it became obvious that they are not as clearly defined for oral care procedures as for other nursing care procedures:

*Well, I really ought to have a look at them. I certainly will in the future, I guess. See how it works ...* (MAS)

**Table 1. During the manifest and latent analysis, the following six categories and three themes emerged**

Category	Theme
Key Processes	Organization
Communication	
Priorities	Staff Approach
Competence	
Good Oral Health	Staff's Views on Residents' Needs
Autonomy	

The case manager described general aid assessment as an act of public authority, according to the Social Services Act. She stressed that this assessment provides a very important basis for individual daily nursing care. The assessment is followed by the drawing up of a nursing implementation plan, at a nursing conference, with the resident and/or relative, contact nursing assistant and a registered nurse present. According to a care manager, no explicit plan for oral care is usually drawn up. Instead, it is generally assumed to be included in the overall daily care.

*...so after a certain number of weeks, within a month, we have an introductory talk. On the basis of that talk we draw up an implementation plan, including oral health care. In it we describe what help the resident needs with his or her personal hygiene, etc. We, the care managers, don't participate in this work. It's done by the relative and the nurse ...* (Care manager)

One MAS pointed out that she is responsible for quality assessment and improvement in the medical care, given by other registered nurses that are not MAS. The MAS described oral care as the responsibility of the registered nurses, not MAS.

*I do the quality assurance on the health and medical care in our municipality. I work largely with guidelines, checks, and assessments in collaboration with others ...* (MAS)

*I actually consider it more the responsibility of the nurses than of our care managers to ensure good oral hygiene. The heads of unit work much more with issues relating to personnel and finance...* (MAS)

The care managers described their overall responsibility for high standards of daily care of the residents, and financial matters, but they were not always familiar with the nursing work in detail. The work as care manager does not require medical or nursing training.

*... ultimately I am, of course, responsible for ensuring that good care is given, as are all care managers. But the nurses, not we, are close to the residents. What we are supposed to do is to be aware of what they are doing and know approximately how things look and what's going on ...* (Care manager).

One registered nurse stated that as a nurse she is not really involved in the practical oral care work.

*Well, I'm not really very involved in oral hygiene. That work is mainly done by the nursing assistants ...* (Registered nurse)

It became obvious that the nursing assistants are the main category involved in the residents' daily care. It was reported that all residents have a special contact person among the staff who gives particular support to that resident.

*... maybe you take a little extra interest in the ones you are the contact person for ...* (Nursing assistant)

It was described by several informants that in two of the nursing homes visited in this study, there is a dental clinic in the same building, which was perceived as a valuable resource in the oral care work.

*We've got a dental hygienist in the building ... which makes all the difference in quality, having her around ...* (Care manager)

### Communication

It was stated that an implementation plan for nursing care is required for each resident and is supposed to be reviewed regularly as well as when there are changes in the resident's health status.

*Well, the implementation plan is about different things. It may include dental care, or a sore, or for daily hygiene. It's always supposed to be there, and to be followed up ...* (MAS)

Nursing documentation was reported to be an important route for communication, performed in various ways at different facilities. Sometimes, but not always, issues regarding daily oral care work are documented in the resident's electronic patient record, which serves the purpose of general nursing documentation.

*If it hasn't been possible to brush the resident's teeth or the like, this is reported into the computer system because other members of the staff need to know about it too ...* (MAS)

At some nursing homes, both handwritten reports and verbal reports were reported to be used as communication among the nursing assistants at shift changes.

*We write quite a lot down. And we also talk to each other quite a bit, too ...* (Nursing assistant)

From the interviews, it became clear that there are sometimes shortcomings in the reporting routines when tooth brushing cannot be performed properly.

*I guess we're supposed to try to document it, but when there are problems day after day it kind of becomes run of the mill ...* (Nursing assistant)

Some informants described that advice about oral care is often documented on special oral care cards following the dental hygienists' annual oral health assessment visits to the residents. The card is usually posted on the wall in the patient's bathroom.

*If we just open the medicine cabinet door in the bathroom we can see their oral care cards very well, and so we know exactly what the resident needs help with ...* (Nursing assistant)

According to the MAS, there is a system for reporting deviations, mishaps and problems in the daily nursing work. This system can also be used when daily oral care is unsuccessful.

*Yes, I'm responsible for all deviations ... I contact the unit in question and the relevant personnel, and try to have a discussion among myself, the nurse, and the nursing assistants because I'm not the one who's supposed to solve the problem. The solution is up to them, but I am responsible for seeing to it that they find a solution ...* (MAS)

### Staff Approach

Under the theme Staff Approach, two categories emerged: Priorities and Competence.

#### Priorities

The informants stated that oral care is an important part of the daily care and an area for improvement.

*... for them to be comfortable, not be in pain, and get the care they need ... oral hygiene is just as important as anything else we do ...* (Nursing assistant)

*Oral hygiene has pretty low priority compared with personal hygiene and dealing with medication. Lots of the elderly residents already have eating problems and illnesses, so if they have mouth problems, too, that just complicates everything. If that happens, you need to tackle it. In a position like mine, there's so much to do ...* (MAS)

Nevertheless, the informants said that other work tasks are sometimes given higher priority than daily oral care. Lack of time and staff shortages can be obstacles as tooth brushing is perceived as quite time-consuming.

*Right, on an everyday basis, tooth brushing is the most time-consuming. Talking about it, doing it, getting them to agree to it, all takes a lot of time. Washing them, changing their continence pads, putting on their night garments are all much quicker tasks, taking maybe 5–10 min, while tooth brushing takes 20–30 min. And we have to get around to all the residents, give them their medications, etc....* (Nursing assistant)

Some informants also said that oral care may be a difficult task. Some staff suffered from dental fear and some found oral care repulsive.

*Yes, it's true, that sometimes you skip the teeth ... it's almost the most difficult thing we do, looking after other people's oral health. But you have to do your best ...* (Nursing assistant)

*Many people find mouths repulsive, some of the staff experience dental fear themselves, which may be one of the reasons for the shortcomings ...* (Care manager)

#### Competence

Some informants said that nursing professionals need oral care education as they did not get much of it in their basic training.

*I think the staff needs to learn more about oral care which, I believe, is not working out optimally ...* (Care manager)

*I really know very little about oral hygiene. When you train to be an assistant nurse you don't study oral hygiene at all ...* (Nursing assistant)

Some informants said they perceive the annual oral care education provided by dental staff as useful and instructive.

*Of course, continuing education, new things are always coming up and we need to keep abreast, those of us who work with it most and can really use the new knowledge ...* (Nursing assistant)

Other informants, however, described the education sessions as repetitive.

*Unfortunately sometimes they don't change the subject much, and it's the same from one year to the next ...* (MAS)

Suggestions from the informants were given about improvement in the oral care educational sessions to increase the interest in participating.

*It's been hard to get the personnel really interested. I don't know if she's asked to see some revisions in the sessions, with different focus, maybe a workshop, and it could be a bit more fun ...* (MAS)

One municipality had launched a special training programme, in which oral care had been worked in with some other issues. The training programme included diet, nutrition and oral care. This programme resulted in better quality of oral care.

*Lots of the personnel really care about including dental care, too, especially since we had a lot of educational sessions last year. So I believe the quality has improved ...* (MAS)

When asked, some informants in supervising positions reflected on whether their participation in the oral care educational sessions helps to strengthen and develop the oral care work. One care manager had, on one occasion, participated in a session. However, there was no definite opinion from the informants about whether it would improve the oral care work.

*In any case I think it would be interesting to attend some time and see what they talk about ...* (MAS)

Some nursing assistants talked about how they support each other in difficult situations when oral care is performed.

*If one person fails, someone else can go in and try ... we talk about this a lot, about how difficult it is to get them to open their mouths for brushing. We try to give each other hints, do this or that, or 'say Ahh', lie down, sit up ...* (Nursing assistant)

### Staff's Views on Residents' Needs

Under the theme Staff's Views on Residents' Needs, two categories emerged: Good Oral Health and Autonomy.

#### Good Oral Health

Oral health was described by the informants as something that influences the well-being and total life situation of the residents, as well as their general health, and even mortality.

*It affects the person over all, how (s)he feels, is able to eat, everything... it's incredibly important to the wellbeing of the residents ... you hear some older people who actually die because they had such poor oral hygiene. They say older people can develop pneumonia*

*because they have such poor dental care. That's awful ...* (Nursing assistant)

#### Autonomy

The informants recognized that some residents had been neglecting their teeth for quite some time, as they were becoming more and more physically or mentally impaired. However, informants also stated that one can easily violate the integrity of the elderly when daily oral care assistance is needed, as the oral cavity is a sensitive area.

*... coming into the home of another person, who has been independent for maybe 70 or 75 years, and suddenly saying: 'Ok, now it's time for tooth brushing', in a sort of hearty tone of voice ...* (Case manager)

Several informants stated that even if help with oral care is offered by the nursing assistants, it is not always well received by the residents.

*There something very special about oral hygiene. There's something insulting about it ...*

*Some people do react aggressively, and it is a violation, and it brings out some people's fighting instincts, because they don't want it ...* (Nursing assistant)

One MAS stated that no force is allowed in the care of the dependent, unless a certain nursing intervention is vital. All nursing care is based both on the individual's expressed needs and on respect for a person's autonomy and integrity.

*Well, of course if there's someone who doesn't want to brush his teeth at bedtime, my priorities ... well, I don't force them. It can wait until morning in that case ...* (Nursing assistant)

Many informants had a sense of resignation. They expressed the feeling that there is not much one can do when, for example, residents with dementia refuse help with their oral care, and also that the situation can vary from day to day.

*The worst thing is that they don't always open their mouths properly. You almost feel as if you are hurting them ...* (Nursing assistant)

*A person with dementia may not open his or her mouth however much you urge them, which makes it really difficult. You learn some tricks, and get some tips from the dental hygienists about what to do, but it's not easy ...* (Care manager)

One MAS pointed out that a family contact can inform the nurses about the person's past, which may be helpful in their nursing work.

*If they can't talk themselves, you have to try to find out what their lives were like, and what they used to like, in the days when they could express themselves ...* (MAS)

From the interviews, a picture emerged that although oral care is present in the nursing work concerning organization,



staff approach and the residents' needs, it did not seem to have a self-evident and integral position, but a more peripheral role in the nursing work (Fig. 1). No one appeared to take explicit responsibility for daily oral care at management level. This was mirrored in an overall impression that there was room for improvement in oral care procedures, if they were brought more into focus in all three themes that emerged in this study (Fig. 2).

## Discussion

Taken together, the themes and categories suggest that there is potential to improve daily oral care for the dependent elderly. A number of aspects and ideas for improvement emerged, sometimes expressed as clear suggestions, sometimes 'concealed' in the material, expressed as problems when the care was not working. We found the following to be important aspects.

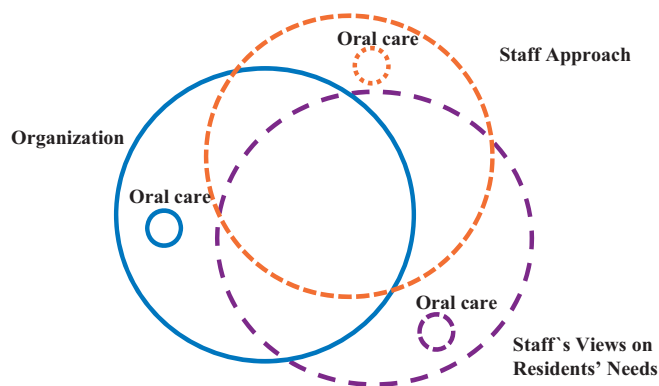


Fig. 1. The situation today with oral care present in the nursing work, however without a central, integral position.

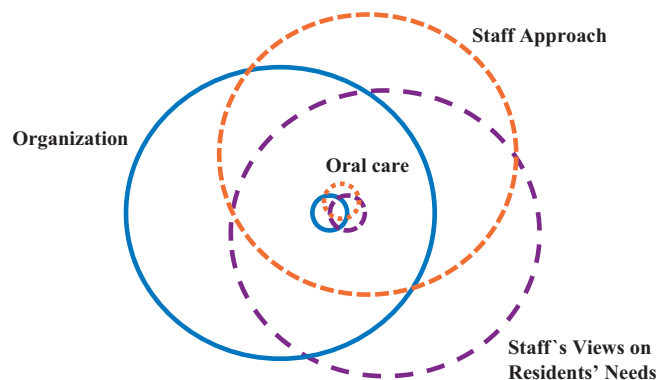


Fig. 2. An ideal situation in which oral care has a central, integral position in the nursing work, both concerning Organisation, Staff Approach and the Residents' Needs. For detailed description of improvement potential, see under *Discussion*.

## Improvement potential

### **Organization (Key Processes, including structure and support resources, and Communication among staff):**

To improve oral care, there are opportunities to work with existing structures and to clarify responsibilities and key processes. Oral care procedures could be further developed in:

- 1 The aid assessment.
- 2 The implementation plan.
- 3 Quality assessment.
- 4 Continuous nursing documentation.
- 5 Dental hygienist support.
- 6 Guidelines.

### **Staff Approach (Priorities and Competence):**

Oral care is included in the nursing work but not as a prioritized task. It could be improved by:

- 1 Management involvement.
- 2 Resource planning (time, priorities).
- 3 Raising competence.
- 4 Improved education.
- 5 Enhanced staff cooperation.

### **Staff's Views on Residents' Needs (Good Oral Health and Autonomy):**

To deal with ethical dilemmas and avoid violating patients' autonomy when performing daily oral care, procedures could be further developed by:

- 1 Involvement of relatives.
- 2 Dental service availability.
- 3 Collaboration with dental staff.

Qualitative research is not aimed at giving a broad overview but at going deep into areas in which there is too little knowledge, to discover new aspects. In this detective work, it is of great importance to collect as varied data as possible. The informants who participated in the interviews were all involved at various levels in the dependent elderly residents' oral health care. Furthermore, the different occupational groups also represented three different municipalities. The saturation process depends on the variety of data as well as on how many aspects of the studied phenomenon you want to focus on. In this study, the nursing personnel were recommended by the care managers and two care managers were interviewed together, at the same time. These factors may have influenced the responses and the study result. Further, the authors have different experiences of oral health care work with the dependent elderly and of qualitative research.

We focused on important factors for well-functioning daily oral care for the dependent elderly. Traditionally, studies of oral care in nursing care have dealt with one specific professional group (11, 12, 15), but there are many actors involved in elderly care today, and the municipalities have different organizations. A chain of events or circumstances has to be in place

to achieve a good oral care outcome. The professionally experienced dental hygienists who performed the interviews in this study were able to expand on the discussion with relevant follow-up questions and to discover which areas were in need of elucidation.

A Swedish annual report from 2005 showed that less than half of nursing care recipients had good oral hygiene. More than 20 per cent had poor oral hygiene (16). Comparatively, this is as if 20 per cent of the residents in nursing homes had poor general hygiene at a level that can cause disease. This would probably give rise to major headlines about the lack of quality of care, while oral hygiene, in contrast, seems to lapse without any furor. It could be speculated that one explanation for this is that there is too little knowledge and insight among nursing professionals into how to assess oral hygiene and about the serious consequences of poor oral hygiene. Perhaps staff may also feel that oral care is a private matter. Personnel in our study expressed that performing oral care in a dependent elderly who cannot cooperate may create a risk of violating that patient's integrity (11).

In a study from 2006, the oral health and treatable needs of the elderly and disabled individuals in seven places in western Sweden were described. A great need for dental treatment was found (17). Various measures have been tried, among those, education for health care professionals, to improve oral health. Brett *et al.* demonstrated improvements in oral health, as measured by reduction in an initially high level of plaque, in the elderly in care homes after education had been given to the staff (18). It has also been shown that special oral care training can result in a higher level of taking oral care responsibility among nursing assistants (19). Thus, it seems that the oral health situation in the elderly can be improved by staff education. However, the effects of education decline over time and it needs to be repeated (20).

In our study, the staff considered oral health education important, but in some cases, the sessions were regarded as too similar over the years. The staff expressed a desire for the education to be at a deeper level, and this requires time. More thorough training also requires fundamental basic oral health skills among the health workers. Today, the amount of oral health care education in basic training for health professionals is limited (21), and the situation is further complicated by high staff turnover.

Education alone may not be enough, but in combination with other measures such as realistic strategies (22) and oral care procedures, routines and follow-up assessments (23), it may give positive results. In a study from Finland, attention was drawn to the fact that the need for oral care increases in the elderly along with increased general care needs. The importance of guidelines and good oral hygiene practices as an integral part of nursing emerged (24). The importance of and need for oral hygiene protocols and guidelines has also been stressed by de Visschere *et al.*, although they pointed out the difficulties in evaluating the effects of supervised implementation of such guidelines due to variation, both at institutional and individual patient levels (25).

Daily oral care for patients with extensive general care needs has been shown in many studies to be given low priority as compared with other nursing work (11, 21, 26, 27). In this study, the staff described oral hygiene as an important part of nursing care but indicated that it seemed to have no clear, integral role in daily care. Issues of oral care in relation to dementia and ethics were also stressed by the informants. All the professionals described difficulties in performing oral care, particularly in patients with dementia. Ethical dilemmas arise in everyday situations when the dementia residents refuse to accept the daily care of the staff. A nursing home is both a home and a workplace, and these aspects may come into conflict. Ambiguity and uncertainty makes oral care a neglected area. There was a desire among the staff to have more time for relaxing conversation, especially with patients with dementia. They also stressed the importance of supporting each other in situations where there are difficulties in performing oral care.

It has been shown that health professionals know that poor oral hygiene implies an increased risk of oral diseases and poor nutrition. A Swedish study has demonstrated the link between poor oral function and malnutrition in older people in nursing homes (28). Large oral health needs have been identified in the dependent elderly (17). Difficulty was demonstrated in achieving a holistic view of oral health and its importance in relation to general health and quality of life (28), as well as about how oral infections can affect the body as a whole (26).

## Conclusions

In our study, several important aspects of well-functioning daily oral care emerged. Oral hygiene care was performed, but there seemed to be substantial potential for improvement. Oral care routines ought to be implemented early in the care planning process and be made explicit in the nursing documentation. It seems not to be sufficient to promote training and to introduce guidelines; what is needed is a network of oral care activities at all levels in order to have oral care implemented throughout nursing care.

## Acknowledgements

This study was supported by Folk tandvården Värmland, Sweden, and by The Swedish National Board of Health and Welfare. We wish to thank the staff at the nursing homes for their willingness to be interviewed for this study. We also thank Ms Inger Lundberg who transcribed the interviews.

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