

Student focused oral health promotion in Residential Aged Care Facilities

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Abstract

Objectives: A pilot oral health promotion student placement program was developed in February 2009 to provide final year Bachelor of Oral Health students with an opportunity to experience a community based aged care placement, and to provide health promotion to residents and staff within these Residential Aged Care Facilities (RACF).

Design: Students in the final year of the Bachelor of Oral Health, University of Newcastle were placed in Residential Aged Care Facilities (RACF) that volunteered to participate in the program. Management at the RACF were interviewed to determine existing levels of oral health awareness and services provided, and the participating students completed pre-and post-participation surveys to determine knowledge and experience with older adults.

Results: A total of 54 students participated and were placed in 17 RACF across the Central Coast area of New South Wales, Australia. Students produced oral hygiene teaching aids and a scientific poster as assessment tasks linked with the placement program, and assisted residents with their oral hygiene care. Students identified improvement in their skills and knowledge as a result of the experiences during the placement program.

Conclusions: The student placement program provided a supportive teaching and learning environment where students built on and improved their communications skills and oral health knowledge pertaining to the older person.

Introduction

The institutionalised elderly have long been identified as a high risk group for dental disease and poor oral hygiene care. These functionally dependent older adults have regularly been shown to have higher levels of edentulism, significantly more caries and plaque deposits and worse oral hygiene than their community dwelling functionally independent colleagues (Chalmers, *et al.*, 1999, Chalmers, *et al.*, 2002). Concomitant chronic medical conditions such as dementia or Parkinson's disease significantly increase these statistics in both cohorts (Chalmers,

et al., 2005). Hopcroft, *et al.*, (2008) reported that for residents living in Residential Aged Care Facilities (RACF) these high oral disease rates are directly linked to the inability to access dental services and in particular preventive dental care. Residents within RACF face significant barriers to good oral hygiene care, including lack of available staff, both dental and nursing, and lack of appropriate oral health knowledge and skills in both of these groups (Chalmers, *et al.*, 1999, Chalmers, *et al.*, 2001).

Poor oral health can have a profound impact on quality of life including comfort, eating, appearance and the ability to socialise. Chalmers (2003) and Marino, *et al.*, (2005) reinforced that older adults deserve to eat and talk comfortably, to be pain free and maintain the self-esteem that they experienced earlier in life. Older adults living in RACF should have access to appropriate oral health care and the ability to maintain good oral hygiene practices.

Historically, there has been very little geriatric oral health promotion, particularly culturally and linguistically appropriate programs. Several myths have contributed to this situation, including that older people are not willing to change their attitudes or behaviours and that health promotion for this group is unnecessary and not cost-effective (Chalmers, 2003). It has been recommended that dental education should provide a better understanding of geriatric dental issues including a "specific clinical exposure to provision of dental services to the homebound and institutionalised", and that auxiliaries such as dental hygienists would be able to provide a significant amount of this care (Chalmers, *et al.*, 1999). Additionally, it has been recognised that contemporary geriatric oral health promotion needs to include practical training for RACF staff (Chalmers, 2003).

The involvement of undergraduate students in the provision of preventive oral health care and education in RACF provides an opportunity to address the deficit in oral health care and education. Mascarenhas, *et al.*, (2007) stated that community student placement programs provide the student with a significant experiential real life learning opportunity while providing a level of care that may otherwise not exist.

The program reported here was part of undergraduate student learning in the Bachelor of Oral Health, University of Newcastle, in collaboration with Northern Sydney Central Coast Area Health

Services and Centre for Oral Health Strategy, NSW Health, and 17 participating Residential Aged Care Facilities that provide care for older people across the New South Wales Central Coast region.

The objectives of this project were to determine the effect that an undergraduate student placement program had on the oral health knowledge of residents and staff within RACF on the Central Coast and how the placement program effected student knowledge and skills development.

The following criteria were used to evaluate to program:

1. Determine prior existing knowledge of undergraduate BOH students' and their previous exposure to RACF.
2. Determine existing oral health knowledge of staff and residents within RACF.
3. Improve oral health practices and knowledge of residents and staff within RACF by providing intensive student experiential learning programs comprising oral health education and the development of oral hygiene manual skills and aids to assist residents and carers within the participating RACF.
4. Determine the geriatric oral health knowledge of the participating students after the placements.

Design

A database of RACF on the Central Coast was established and information including an invitation to participate in the pilot oral health student placement program was sent to 37 facilities. All participating RACF were visited prior to the commencement of the student placement program and management were individually interviewed and asked to identify existing oral hygiene practices within their RACF and the level of existing staff oral health awareness.

A total of 54 students were allocated to participating RACF according to the size of the facility and capacity to support student placements. Students were asked to complete a pre-placement survey to identify existing knowledge and exposure to the elderly and a post-placement survey which identified areas of acquired knowledge as a result of the placement program.

Students were provided with orientation prior to the student placement program via a one day student workshop which included emergency protocol, manual handling and appropriate aged care insight into the needs of dementia patients. All RACF then provided facility specific student orientation once they arrived at their individual placements. Placements ran throughout Semester 1, 2009.

In addition to the pre- and post-placement surveys, students were required to complete pre-determined tasks as part of the assessment process for this unit of work. These tasks included providing

staff oral hygiene education sessions, keeping a reflective folio and conducting an oral health needs analysis prior to designing an oral health education information poster, specific to each individual RACF.

To assist the students they were provided with an oral health kit containing toothpaste, brushes, denture cleaning aids, interproximal brushes, mouth rinses and products to treat xerostomia, to be used as examples of appropriate products, and teaching aids.

Results

A total of 17 RACF acknowledged their interest and returned acceptance documentation by the October 2008 deadline. All 17 RACF managers reported that oral health was part of the general health assessment for residents entering a facility. Several facilities advised that an oral health risk assessment was completed as part of the initial health assessment at the admission stage for new residents but that this was a very basic assessment identifying natural teeth, dentures and any abnormalities and did not provide a comprehensive dental analysis.

51% of RACF managers reported that staff were trained in oral hygiene practices, however, staff received varying levels of training, which was often dependent on time. Regular oral health training for staff in an accredited format was not consistent across all facilities and the issue of new staff receiving oral hygiene training was adhoc. None of the RACF reported that dental care was readily available to residents, and none had dental facilities on site. RACF managers reported the dental care for residents was limited, that regular access to visiting dental professionals was non existent and that this was a major concern for staff and families trying to access oral health services for family members/residents. 100% of RACF managers reported that oral care was part of daily hygiene practice but that the standard of appropriate oral hygiene care and the frequency of care was inconsistent. All RACF managers maintained an interest in participating in the student pilot placement program.

The pre-placement survey was completed by all 54 students, of those 29 (54%) advised they had no previous exposure to residents within RACF. Of the 25 students who advised they had some previous experience with institutionalised older adults, only 6 (11%) had direct experience in the following capacities; working as a ward clerk, an events planner, an aged care nurse, a podiatrist and as a work experience school student. The remaining 19 students indicated that their only exposure was with elderly family members.

Students identified the placement program as having the potential to benefit RACF staff by providing them with oral hygiene information, demonstrating oral hygiene practices in person rather than learning from a book, providing

reinforcement of good oral health and its effect on the rest of the body and providing oral hygiene skills and knowledge that could be passed on to residents. 78% of the students acknowledged concerns about attending the placement program which included anxiety about getting sick, lack of confidence about what was expected during the placement, worry that the residents might not want to participate, nervousness about dealing with patients with dementia, and fear of the unknown and being exposed to confronting situations.

Students provided comprehensive oral hygiene instruction for residents and staff and performed clinical care where appropriate in the form of cleaning natural teeth with the residents own toothbrushes, and cleaning of dentures.

Students provided staff education sessions for 16 of the 17 facilities, providing between 1 and 8 education sessions during the placement. Staff were encouraged to participate and students attempted to maximise attendance at these sessions by offering sessions at various times to accommodate staff on different rosters or shifts. The facility that did not receive staff education sessions was provided with an information pamphlet specifically designed for that facility which was distributed to staff. There was an overwhelming concern from students that all RACF staff did not attend the oral health sessions provided. Students reported that this may have related to demands on staff time, management co-ordination or lack of interest. It may also be attributed to the fact that sessions were not compulsory. In an attempt to provide information to as many staff as possible, some students returned to the RACF to provide education sessions in their own time during the University break. Several strategies were developed by the students to convey oral hygiene messages. One group produced a pamphlet that was attached to staff pay slips in an attempt to catch those staff members who did not attend education sessions.

Students designed and produced appropriate facility specific oral hygiene teaching aids, developed policies for implementation into admission processes, developed staff oral hygiene practices and protocols, and produced aged care oral hygiene posters as part of the assessment tasks required to successfully complete their health promotion unit of work as part of the Bachelor of Oral Health degree. Students consulted with RACF staff and residents before developing oral hygiene information, this enabled the students to produce a variety of material specific to their RACF placement. Students used appropriate strategies to collect and produce information, asked for input from RACF staff and residents prior to production and evaluated their processes before finally completing the tasks. As a result, students produced and submitted a high standard of poster specifically designed for their RACF target group. This was the culmination of the

placement experience and their final assessment task for health promotion.

A total of 48 (89%) of the post-participation surveys were returned. 85% of students reported that the placement had improved their understanding of aged care oral health needs. 25% of students reported that their knowledge had improved considerably, 65% reported some improvement, 8% were unsure of any improvement, while 2% reported no improvement. 77% of students advised their RACF was suitable for student placement, 23% of students expressed concern that their RACF placement was not suitable.

Discussion

The levels of oral health awareness and services provided in the participating RACF was similar to that reported in many Australian nursing homes (Chalmers, *et al.*, 1999, Chalmers *et al* 2001, Hopcroft, *et al.*, 2008).

Prior to the placement student exposure to elderly in RACF was very limited with only 11% of students having relevant prior experiences. The placement provided students with a real life learning experience that aimed to improve their skills and confidence in dealing with functionally dependent older adults and providing appropriate oral health education for RACF staff.

The students had a variety of experiences while on placement, some very rewarding, others more challenging. These experiences provided the students with a realistic insight into the limited provision of oral hygiene practices and oral hygiene education being provided in RACF, reinforcing the dearth of geriatric services reported by Chalmers and others (Chalmers, *et al.*, 1999, Chalmers, *et al.*, 2001). The students' educational experience was enhanced by their own self direction and commitment to the placement program. Students identified that the placement was beneficial to their knowledge base and improved their confidence to work independently.

The student placement program provided RACF staff with access to oral hygiene resources to improve their own knowledge and practices. Training was provided in the form of group education sessions and one on one consultation. The education sessions were supported by teaching aids designed by students to meet individual needs of the RACF. These teaching aids were left at the RACF at the completion of the placement program.

Those RACF that received education sessions enthusiastically expressed appreciation of improved staff oral health knowledge. Provision of these educational sessions meets the recommendations of Chalmers (2003) in providing practical training for staff as a necessary component of contemporary oral health promotion for the elderly.

The student placement program provided RACF residents with access to information and assistance

with oral hygiene practices on an individual basis. Students identified existing oral health conditions such as Candida and xerostomia (dry mouth), poorly fitting dentures and other dental conditions with the potential to cause pain and discomfort. Students' cleaned dentures, assisted residents to clean their own natural teeth and advised products to alleviate conditions causing discomfort. Students alerted residents to oral hygiene issues that could cause general medical problems and provided them with the opportunity to talk about their teeth, dentures and other oral hygiene issues.

Provision of these services is an appropriate use of dental hygienists, and has been recommended as a method to address the lack of services provided in RACF (Chalmers, *et al.*, 1999). Unfortunately, even changes to practice regulations have not seen an increase in the utilisation of these auxiliaries in the provision of dental services in nursing homes (Chalmers, *et al.*, 2001).

RACF were assisted with oral hygiene care for their residents during the placement program, however, appropriate restorative and emergency dental care is currently limited and is very dependent on family input. Emergency services are accessed via Northern Sydney Central Coast Area Health Service Oral Health Clinics and to a lesser extent, private dentists. Cost is a factor, as is travel, and with dementia patients identifying that they need dental care, can be a barrier. It was clear from speaking with RACF Managers and students that oral health is under managed in the majority of RACF.

Conclusions

Students identified in their reflective folios that residents within RACF still care about their appearance and that poor oral health has the potential to affect their quality of life.

The objectives of this program were achieved and the project provided a supportive learning environment where students, staff and residents increased oral health knowledge and developed oral hygiene skills related to care of the older person. The placement program provided a real life learning opportunity and resulted in positive experiences for the undergraduate Bachelor of Oral Health students from the University of Newcastle, Australia.

The project also met many of the recommendations for increased education and exposure in geriatric oral health and strategies required in current oral health promotion for the older adult.

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