

Nutritional status and oral health of residents of aged care facilities

Background: Residents of aged care facilities frequently have poor oral health. . There is evidence to suggest that poor oral health has implications for general health and well being, however the association between oral health and nutritional status is unclear.

Objective: To investigate the association of oral health status and oral health-related quality of life with nutritional status in residents of aged care facilities.

Method: Data was collected from January to March 2015 in two residential aged care facilities in Southeast Queensland, Australia. An aged care dietitian conducted nutritional assessments using the Subjective Global Assessment (SGA). An oral health therapist performed assessments using the Oral Health Assessment Tool (OHAT) and geriatric oral health assessment index (GOHAI). A ranking of healthy (0), changes (1), or unhealthy (2) was recorded for the oral health status, with a maximum total OHAT score out of 16 indicating extensive problems. Total GOHAI scores ranged between 12 and 60, with a higher score indicating better oral health.

Impact of oral health on nutrition

- Of:

Conclusions: Both malnutrition and poor oral health/function were common in this sample of aged care residents. There was an observed reduction in quality of life and increased proportion of dentally functionally impaired residents who were malnourished.

C Hugo¹, <u>N Cockburn²</u>, P Ford², S March², E Isenring¹

¹Faculty of Health Sciences and Medicine, Bond University ²School of Dentistry, Faculty of Health and Behavioural Sciences, UQ

Findings: A convenience sample of 65 participants took part in this study.

Nutrition and oral health of residents

Proportion of malnourished residents (SGA score) was higher than for the state comparison population (Table 1)

Proportion of participants with oral assessment scores of 'healthy' (OHAT) was lower than for the national comparison population (Table 2)

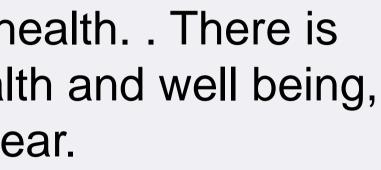
Median OHAT score was 5.5 (out of 16, indicating extensive problems) GOHAI assessment score was 51.2 (SD 7.3) (out of 60, indicating good OHRQoL)

Compared to well-nourished residents, malnourished residents had a higher proportion

- Functional oral health impacts
- Dental referral required
 - Edentulism

Compared to well-nourished residents, malnourished residents had a poorer total: GOHAI score, indicating poorer OHRQoL

• OHAT score, indicating poorer oral health (Table 3)





population (Banks et al. (2007)) SGA scores

Well nourished Moderately malnourished Severely malnourished

1. n not reported

Banks, M., et al., Prevalence of malnutrition in adults in Queensland public hospitals and residential aged care facilities. Nutrition & Dietetics, 2007, 64(3); p. 172-178

Table 2. OHAT scores of aged care residents compared with available national comparison (Chalmers et al. (2009))

(Chainers et al. (2003))						
OHAT scores	Study sample			Comparison population ¹		
	n= 52			n= 455		
	Healthy	Changes	Unhealthy	Healthy	Changes	Unhealthy
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Lips	41 (78.8)	7 (13.5)	4 (7.7)	(71.6)	(28.1)	(0.2)
Tongue	12 (23.1)	36 (69.2)	4 (7.7)	(74.7)	(23.3)	(2.0)
Gums and tissues	9 (17.3)	22 (42.3)	21 (40.4)	(76.0)	(19.1)	(4.8)
Saliva	29 (55.8)	18 (34.6)	5 (9.6)	(86.8)	(11.9)	(0.2)
Natural Teeth	16 (30.8)	13 (25.0)	23 (44.2)	(50.5)	(27.2)	(22.3)
Dentures	41 (78.8)	8 (15.4)	3 (5.8)	(58.7)	(25.7)	(15.5)
Oral cleanliness	6 (11.5)	23 (44.2)	23 (44.2)	(48.8)	(36.9)	(14.3)
Dental Pain	39 (75.0)	12 (23.1)	1 (1.9)	(90.8)	(4.8)	(4.4)

nalmers JM, S.A., Carter KD, King PL & Wright C., Caring for oral health in Australian residential care, in Dental 2009 AIHW: Canberra

Table 3. Oral health scores for well-nouris

Dental Referral Required **GOHAI score**¹ Dental status

Edentate Dentate

5.5 15.(

Number of teeth² 1. Mean (SD)

Total OHAT score²

2. Median (IQR1, IQR3) 3. Including edentate participants



Table 1. SGA scores of the study sample compared an available Queensland comparison

Study population	Comparison population ¹		
n= 62	n= 839		
n (%)	n (%)		
24 (38.7)	(50.0)		
34 (54.8)	(41.6)		
4 (6.5)	(8.4)		

shed and malnourished residents						
Total	Well nourished	Malnourished				
	(SGA score A)	(SGA score B and				
n (%)	n (%)	c)				
		n (%)				
41 (82)	15 (36.6)	26 (63.4)				
51.2 (7.4)	54.1 (7.4)	49.3 (6.7)				
15 (29.4)	5 (26.3)	9 (30.0)				
36 (70.6)	14 (73.7)	21 (70.0)				
5 (4.25,7.75)	5.0 (3.0, 7.0)	6.0 (5.0, 8.0)				
0 (0.0, 21.0)	15.0 (0.0, 25.0)	17.0 (0.0, 21.0)				

