



## Dental hygiene in Dutch forensic psychiatric patients



Yvonne A.B. Werkhoven<sup>1,3</sup>, Arie Dijkstra<sup>2</sup>, Cees van der Schans<sup>1</sup>, Marinus Spreen<sup>4</sup>. <sup>1</sup>Hanze University Groningen, University of Applied Sciences & <sup>3</sup>Academic Center for Oral Health, University of Groningen, <sup>2</sup>Dept. of Social & Organizational Psychology, University of Groningen, <sup>4</sup>Forensic Psychiatric Hospital 'Dr. S. van Mesdagkliniek' Groningen, the Netherlands. Correspondence to [Y.A.B.Werkhoven@med.umcg.nl](mailto:Y.A.B.Werkhoven@med.umcg.nl)

### Aim of the study

To assess the validity and reliability of the Dutch version of the **Oral Health Impact Profile (OHIP-14)** in a sample of patients of a forensic psychiatric hospital.

### Methods

The linguistic validated OHIP-14 was used. A questionnaire, including the **OHIP-14**, an **index of OHB** (10 items; tooth brushing, interdental cleaning and tongue cleaning), **general health perception** (subscale of the RAND-36;  $\alpha=0.73$ ), **expected social outcomes** (ESO,  $\alpha=0.83$ ), and **dental anxiety** (DAS,  $\alpha=0.90$ ) were completed voluntarily by thirty-nine forensic psychiatric male patients. **Dentition characteristics** were administered from patients' dossiers (healthy dentition, slightly unhealthy dentition, mutilated dentition).

### Results

#### Construct validity of the OHIP-14:

Dental anxiety, unhealthy dentition, inadequate OHB, and a negative general health perception were associated with a low oral health-related quality of life (OHQoL).

	DAS	Dentition characteristics	Health	OHB
OHIP-14	.44**	.54*	-.48**	-.39*

Table 1. Correlations (\* is significant at 0.05 level,\*\* is significant at 0.01 level)

#### Regression analysis showed:

**Unhealthy dentition** had independent effect on **oral health-related quality of life**, explaining **24.0 %** of the variance. Figure 1.



.54\*\*

OHQoL

Yvonne A.B. Werkhoven, Abraham P. Buunk, Arie Dijkstra, Rob M.H. Schaub, Cees P. van der Schans, Marinus Spreen (2007)

Oral health-related quality of life in Dutch forensic psychiatric patients: An exploratory study. (Under review-Community Dentistry and Oral Epidemiology).

#### Reliability of the OHIP-14:

**shortform OHIP:** (Werkhoven et al., 2004)

$\alpha = 0.88$ ; N= 40 M= 10.93 (7.10) min-max: 0-31

**OHIP-14:**

$\alpha = 0.91$ ; N= 39 M= 9.31 (8.71) min-max: 0-34

Table 2. Cronbach's alpha, Mean, Standard deviation, and Minimum-Maximum



'Dr. S. van Mesdagkliniek', Groningen

### Conclusions

The **Dutch OHIP-14** is a useful, reliable and valid instrument to measure **OHQoL** in forensic patients with psychiatric disorders. Primarily evidence for the importance of adequate OHB for OHQoL.