

DMFT index among institutionalised and non-institutionalised individuals in Zagreb, Croatia

Kelić, Marija; Musić, Larisa; Čatić, Amir

Conference presentation / Izlaganje na skupu

Permanent link / Trajna poveznica: <https://um.nsk.hr/um:nbn:hr:127:283811>

Rights / Prava: [Attribution-NonCommercial 4.0 International/Imenovanje-Nekomercijalno 4.0 međunarodna](#)

Download date / Datum preuzimanja: **2025-03-14**



Repository / Repozitorij:

[University of Zagreb School of Dental Medicine
Repository](#)

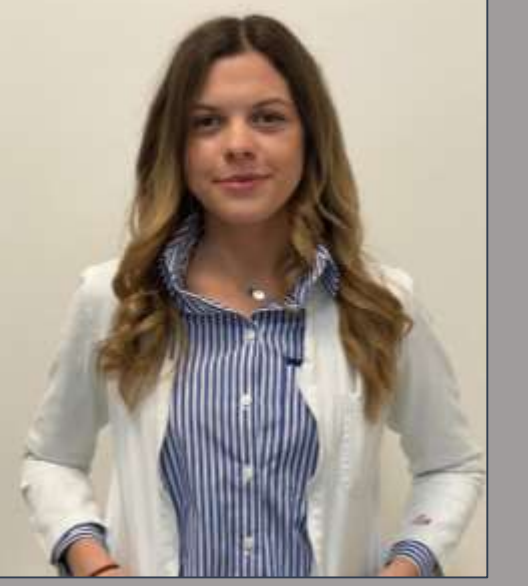


DMFT index among institutionalised and non-institutionalised elderly individuals in Zagreb, Croatia

Kelić Marija¹, Musić Larisa², Čatić Amir³

School of Dental Medicine, University of Zagreb, Croatia

¹undergraduate student; ² PhD, Department of Periodontology; ³ professor, Department of Fixed Prosthodontics.



Marija Kelić
mkelic@sfzg.hr
School of Dental Medicine,
University of Zagreb

BACKGROUND

- The population of elderly people remains at greater risk for oral and dental pathologies as they often do not receive necessary and timely oral care.
- Institutionalised individuals generally present with worse oral health as they often depend on caregivers for oral health care provision. Even when the care is provided, it can still be argued whether the care is professional enough and properly patient-focused.
- This study aimed to assess the DMFT scores in a population of elderly people in Zagreb, Croatia and compare it between institutionalised and non-institutionalised individuals.

RESULTS

- Nursing home residents were significantly older than community retirees, 83.6 ± 6.8 vs 70.3 ± 6.8 , respectively.
- Nursing home residents had a significantly higher mean DMFT score, 23.9 vs 18.4 ($p=0.013$) and an **M component score**, 22.4 vs 14.7 ($p=0.000$).
- **F component score** was significantly higher among community retirees compared to nursing home residents, 2.7 vs 0.9 ($p=0.000$). F component was generally significantly higher in men.
- The **D component score** was the lowest among all components for both nursing home residents and community retirees, 0.6 and 1.0, respectively.

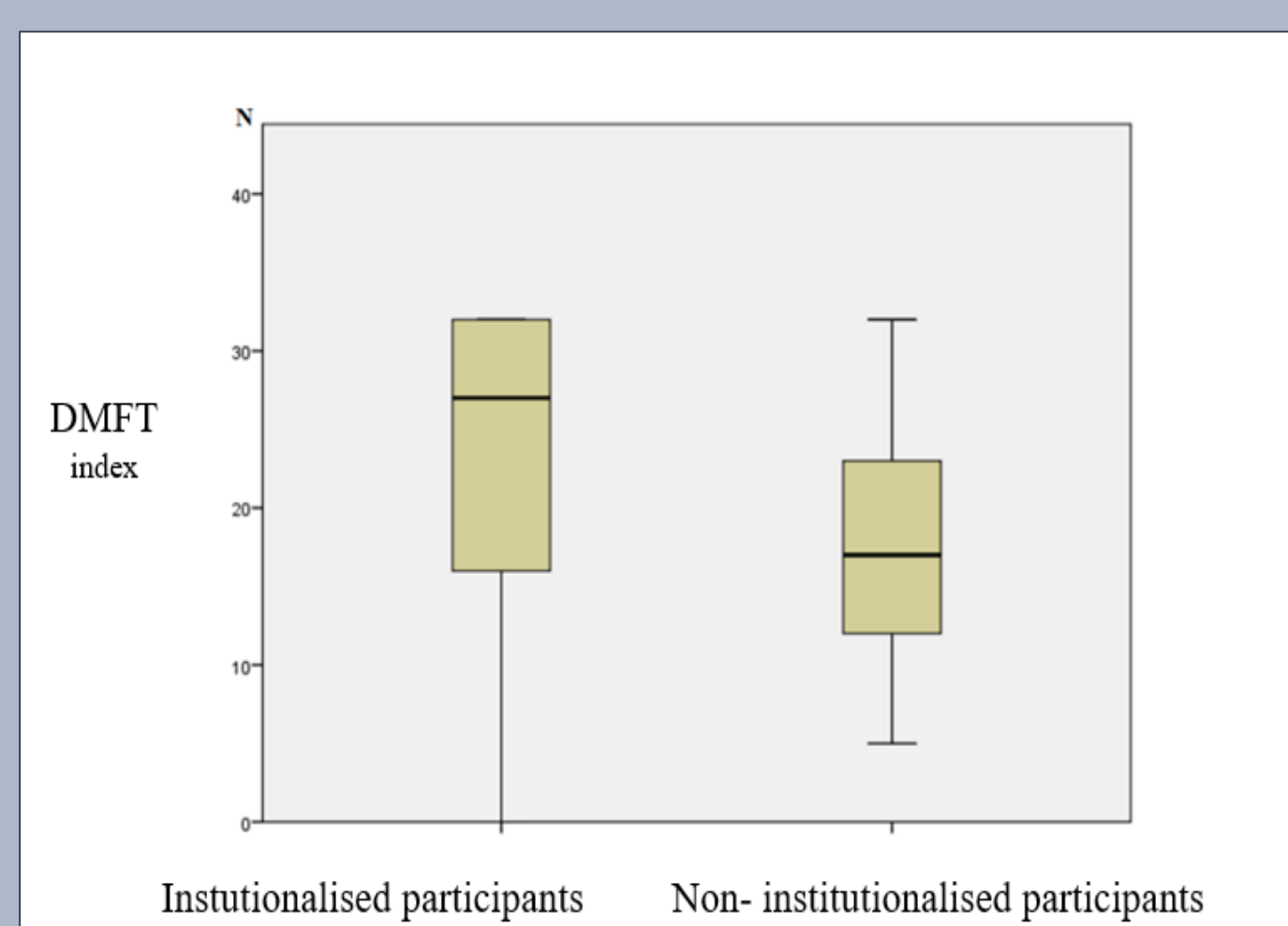


Figure 3. Comparison of total DMFT index between institutionalised and non-institutionalised study participants ($p=0,013$).

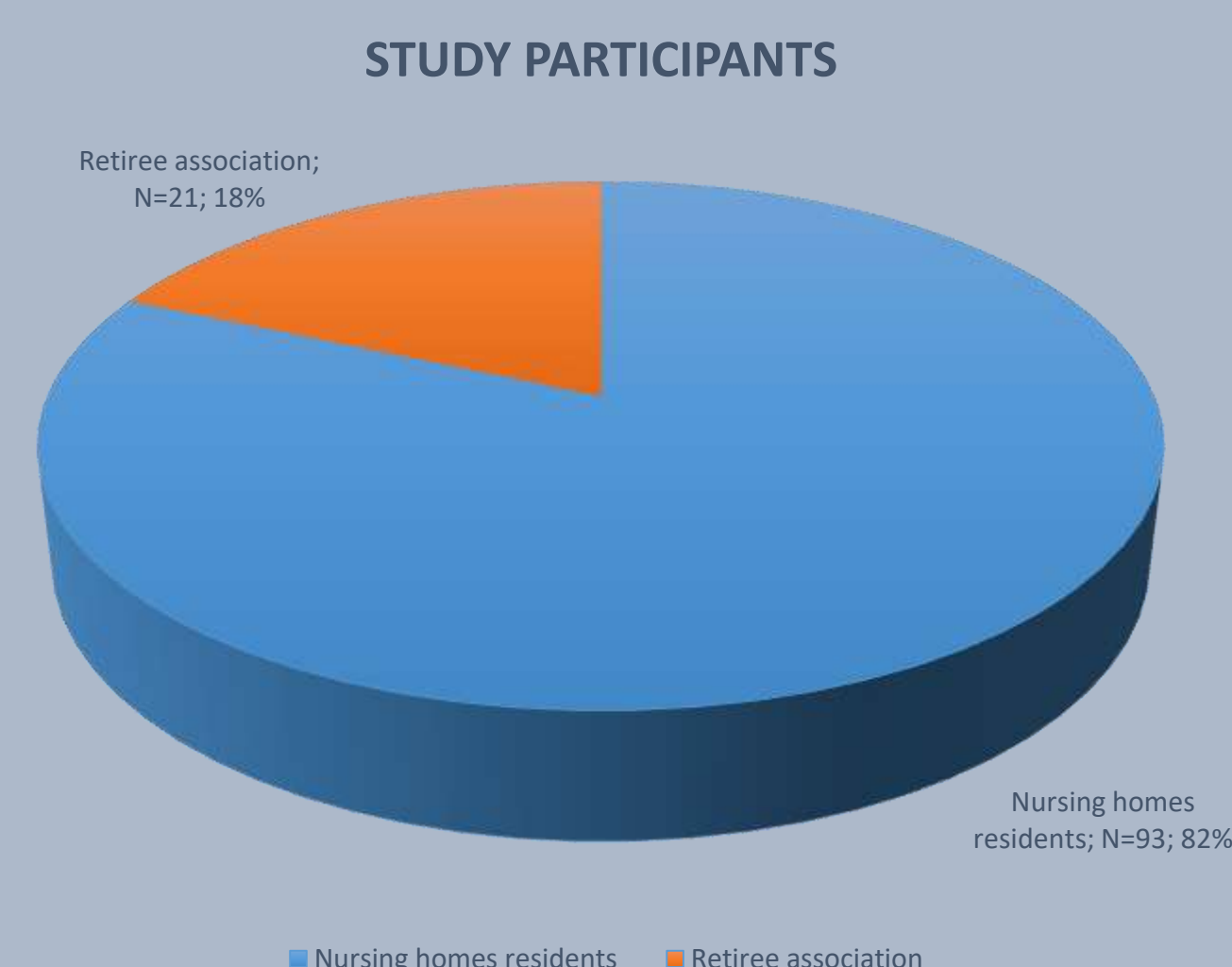


Figure 4. Proportions of institutionalised and non-institutionalised study participants in a total number of participants involved.

METHODS

- This cross-sectional research was conducted as part of a volunteer academic student initiative called the Gerontoprojekt. (Figure 1.)
- Study participants comprised individuals from five nursing homes and one community association of retirees in Zagreb, Croatia.
- A questionnaire was used to record demographic, health- and oral-health-related data.
- In addition, trained students under supervision of senior clinicians performed comprehensive oral examinations and recorded clinical data. (Figure 2.)
- This study was approved by the Ethics Committee of the School of Dental Medicine, University of Zagreb, Croatia and all participants had signed informed consents.



Figure 1.- Members of the Gerontoprojekt with mentors



Figure 2.- Oral examination in a nursing home

CONCLUSIONS

- The results suggest a generally poor oral status of the elderly in the Zagreb area.
- Institutionalised individuals presented worse oral status than non-institutionalised, with a more significant tooth loss.
- High DMFT scores were mainly contributed to by the number of extracted teeth.

ACKNOWLEDGEMENTS

- Gerontoprojekt truly appreciates nursing homes caregivers and protectees of the following nursing homes on their time and willingness to participate in this study:
 - Nursing home Dubrava- Zagreb, Residency Kastelan, Nursing home Centar, Nursing home Medveščak and Nursing home Trešnjevka
 - Retiree association Prečko.

LITERATURE

- Farias IPSE, Sousa SA, Almeida LFD, Santiago BM, Pereira AC, Cavalcanti YW. Does non-institutionalized elders have a better oral health status compared to institutionalized ones? A systematic review and meta-analysis. Cien Saude Colet. 2020 Jun;25(6):2177-2192. doi: 10.1590/1413-81232020256.18252018. Epub 2018 Oct 5. PMID: 32520263.
- Chan AKY, Tamrakar M, Jiang CM, Lo ECM, Leung KCM, Chu CH. A Systematic Review on Caries Status of Older Adults. Int J Environ Res Public Health. 2021 Oct 12;18(20):10662. doi: 10.3390/ijerph182010662. PMID: 34682414; PMCID: PMC8535396.
- Andersson P, Renvert S, Sjogren P, Zimmerman M. Dental status in nursing home residents with domiciliary dental care in Sweden. Community Dent Health. 2017 Dec 1;34(4):203-207. doi: 10.1922/CDH_4100Andersson05. PMID: 29136361.
- Glazar I, Mulvić Urek M, Kusić D, Prpić J, Mišković I, Kovačević Pavičić D, et al. Salivary Flow Rate, Oral Yeast Colonization and Dental Status in Institutionalized and Non-Institutionalized Elderly. Acta Clin Croat. 2016 Sep;55(3):390-395. doi: 10.20471/acc.2016.55.03.06. PMID: 29045101.

Table 1. DMFT index comparison among institutionalised and non-institutionalised participants (t-test for independent samples)

	NURSING HOME RESIDENTS						COMMUNITY RETIREES						p
	Med	Min	Max	IQR	Mean	SD	Med	Min	Max	IQR	Mean	SD	
D-component	0,0	0,0	10,0	1,0	0,6	1,4	0,0	0,0	10,0	1,0	1,0	2,7	0,310
M-component	25,0	0,0	32,0	19,0	22,4	10,2	13,0	0,0	32,0	17,0	14,7	10,8	0,000
F-component	0,0	0,0	9,0	1,0	0,9	1,9	1,0	0,0	10,0	5,0	2,7	3,0	0,002
DMFT index	27,0	0,0	32,0	17,0	23,9	9,0	17,0	5,0	32,0	14,0	18,4	8,9	0,013

Med- median; Min- minimum; Max- maximum; IQR- interquartile range; SD- standard deviation

