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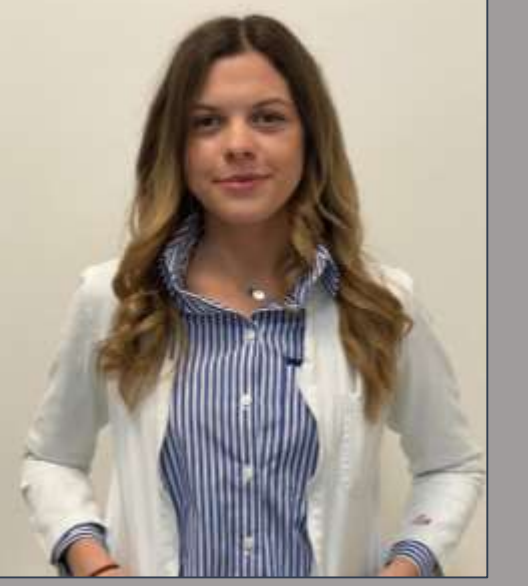


# DMFT index among institutionalised and non-institutionalised elderly individuals in Zagreb, Croatia

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## 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,  $83.6 \pm 6.8$  vs  $70.3 \pm 6.8$ , 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.

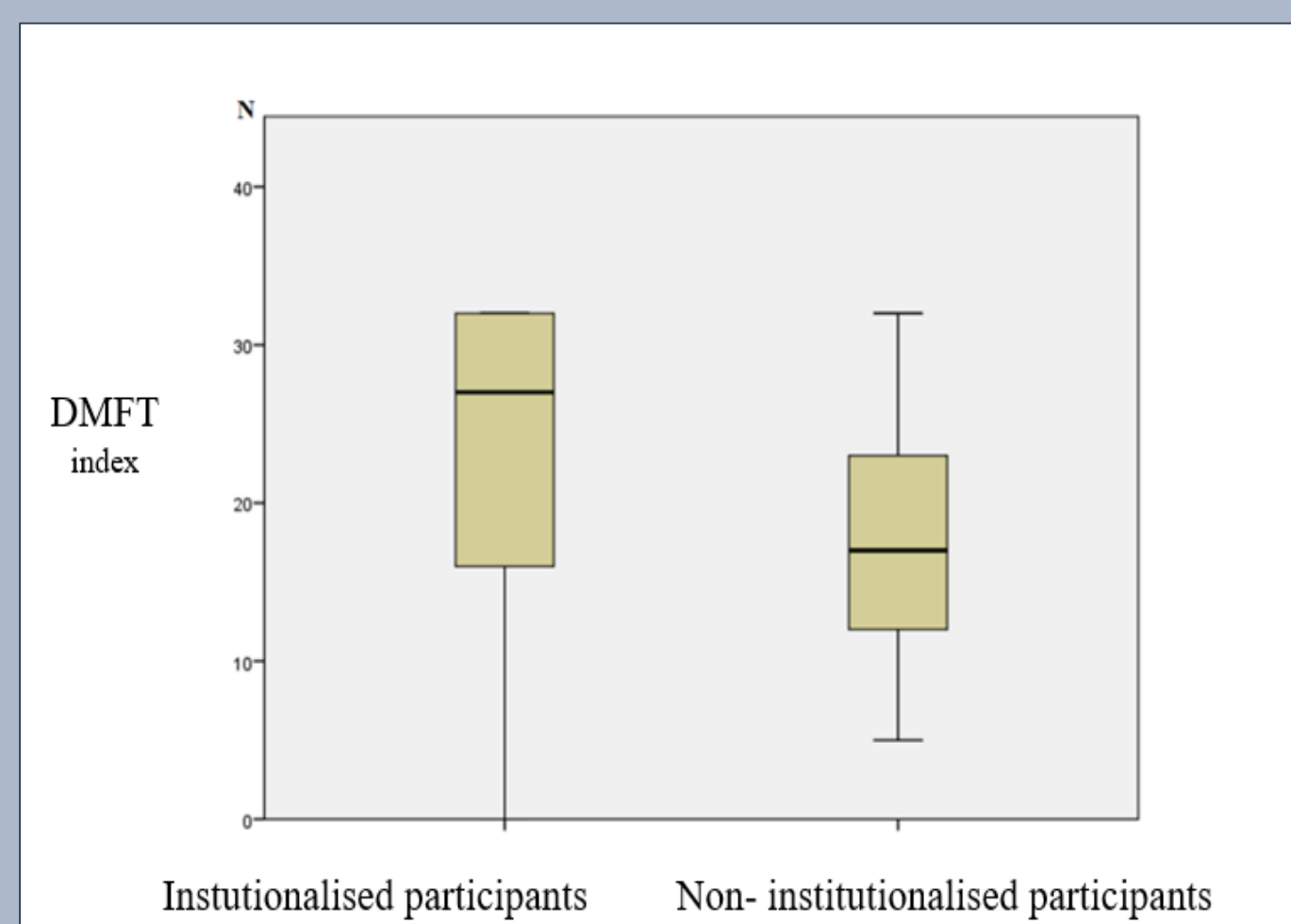


Figure 3. Comparison of total DMFT index between institutionalised and non-institutionalised study participants ( $p=0,013$ ).

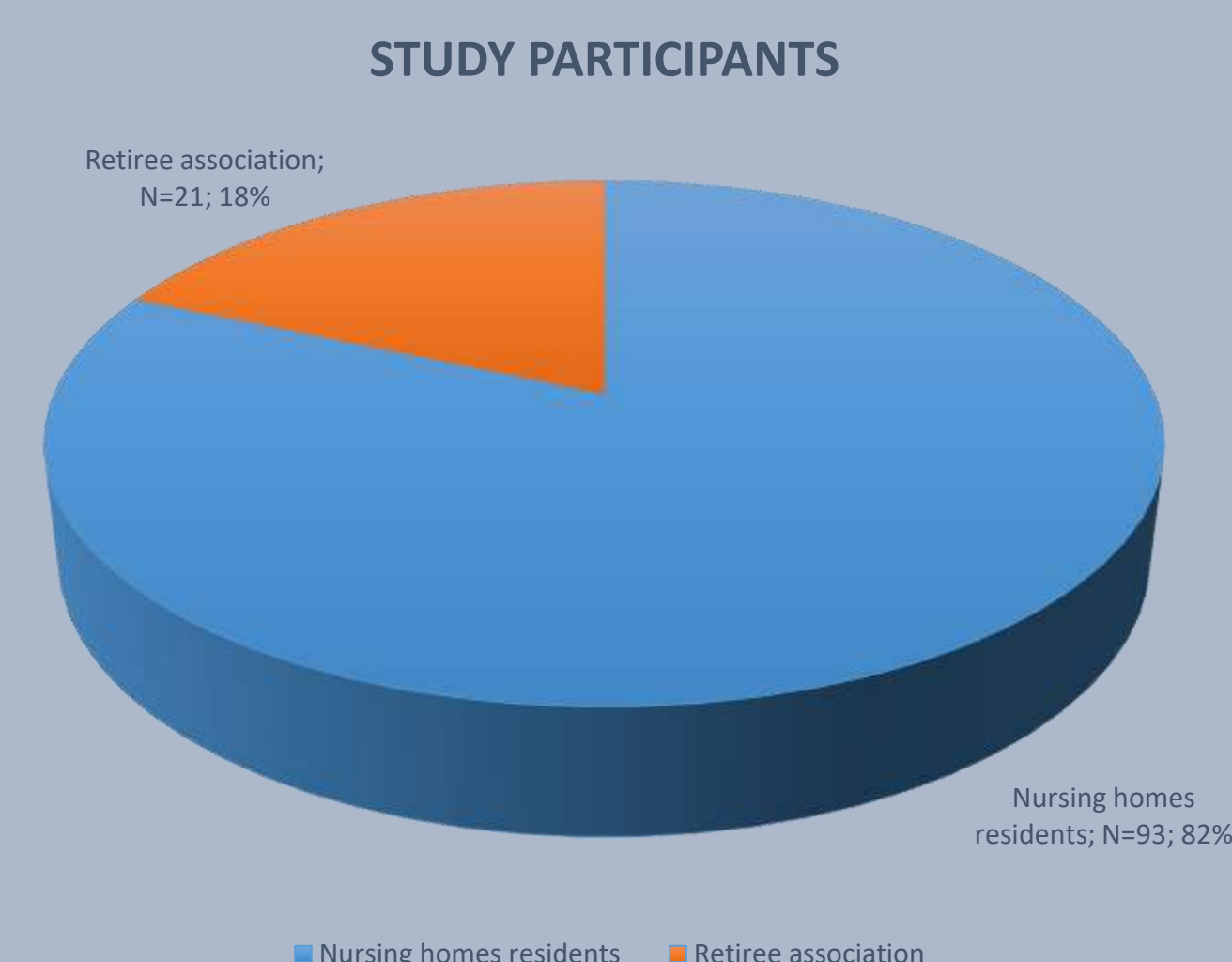


Figure 4. Proportions of institutionalised and non-institutionalised study participants in a total number of participants involved.

## 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

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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

