

# Assessment of Knowledge and Attitudes to Preserve Oral Health among Older People Aged 60+ in FYROM

## SUMMARY

**Introduction.** In the last decade, the impact of oral health on overall health status in the elderly has attracted considerable attention. Elderly people are often not aware that oral diseases and tooth loss can be prevented. Oral health behaviour involves acquisition of individual habits for preservation and maintenance of oral health, such as regular brushing and brushing teeth, using fluoride-rich toothpastes and dental floss, reducing sugar in the diet and habit of regular visits to the dentist. The aim of this research was to assess knowledge and attitude toward maintenance and preservation of oral health in people over 60 years in FYROM.

**Methods.** This is a cross-sectional study of the population, older than 60 years in FYROM, who use dental services and treatment in public health institution, at the Faculty of Dentistry in Skopje (Clinic of Mouth and Periodontal Diseases) and in the Health Centre in Skopje. As an instrument of this research, a questionnaire which included issues related to oral health behaviour was used for the targeted population. 193 patients answered the questions in this questionnaire.

**Results.** The age of respondents was significantly associated with the frequency of brushing their teeth and interdental spaces, as well as the habits of frequent dental care visits to the dentist. The gender of the patients had a highly significant effect on the use of fluoride toothpastes and the time that had passed since their last visit to the dentist ( $p < 0.01$ ). Education level in elderly patients significantly affected the knowledge of the individual oral health care.

**Conclusion.** Respondents with higher education brushed their teeth and interdental spaces more frequently and had regular dental check-ups. Furthermore, they almost always used fluoride toothpaste when brushing their teeth. The increased concern for their own health correlated to a higher level of knowledge, awareness and attitudes about oral health care, and follow recommendations by a dentist. In FYROM, oral health behaviour of patients above 60 years is far behind the level of care that is achieved in higher developed countries.

**Keywords:** Oral Health Care; Oral Health Behaviour; Population, old

M. Šapurić<sup>1</sup>, F. Tozja<sup>2</sup>

<sup>1</sup>PZU "ProdentIdadija", Skopje

<sup>2</sup>Institute of Public Health, Faculty of Medicine, Skopje, FYROM

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## Introduction

In the past decade, the impact of oral health on overall health in older people attracted a lot of attention, globally. The health authorities around the world are especially faced to the problem of the increased burden

of oral diseases in elderly patients<sup>1,2</sup>. The percentage of elderly people in developed countries today is higher than in developing countries. By 2050, an increase in the population over the age of 65 is expected, including those of aged 80 years or above. Currently this age group accounts for less than 2% of the total world population,

but the number of old people is expected to increase from the current 90 million (in 2005) to 400 million in 2050<sup>3</sup>. Similarly, the age structure of population in FYROM has evidently faced significant changes - in the period from 1999 to 2009, the proportion of young people (0-14 years) decreased from 22.8% to 17.7%. Proportionally, the elderly population (65 and over) increased from 9.8% to 11.6% - in 2012, this percentage was 11.9%<sup>4</sup>.

In highly developed countries, the economic conditions permit funding oral-health systems and most of these countries even give priority to classical treatment of diseases rather than prevention<sup>5-7</sup>. However, classical treatments of oral diseases are very expensive for the elderly, even in highly-industrialized countries. Therefore, prevention of oral diseases is more important and it depends on the oral health habits of elderly patients<sup>8,9</sup>. One of the main reasons that patients from lower socio-economic environments do not visit a dentist is the insufficient awareness for dental diseases. Older people are often unaware that oral disease and tooth loss may be treated and prevented<sup>10</sup>. It is very interesting that only a few countries have national data about oral health habits among elderly patients. Where the information is available, there are large differences between countries across the region in terms of the frequency and types of oral health habits among older persons<sup>11</sup>. Oral-health behaviour involves the acquisition of individual habits of preservation and maintenance of oral health, such as regular teeth brushing, regular use of fluoride-rich toothpastes, interdental cleaning, reduced intake of sugar, and regular dental check-ups.

Oral-hygiene habits are acquired early in childhood and if so, it is hard to change them in later life<sup>12</sup>. Annual visits to dental offices have been suggested as an acceptable indicator of appropriate use of dental care. The dentists are facing the challenge to preserve as many natural teeth among older people; today, more and more elderly people, especially in countries that are highly-developed, give priority to dental treatment, which will allow preservation of their natural teeth and a nice look of the whole dentition<sup>13,14</sup>.

Oral health among older population in FYROM is alarming and below international standards. Investigations that have estimated the impact of oral health and quality of life in people older than 65 years in this country have shown that oral health in this population is not on a satisfactory level, but given the overall score - 43, which was obtained in this study in which the OHIP-14 questionnaire was used, it proved to be relatively well (given that the total score of the present questionnaire was 52, indicative of poor oral health)<sup>15</sup>. Therefore, it is necessary to fully achieve goals of the Health Strategy of the Country<sup>16</sup>. The **aim** of this study was to assess the knowledge elderly people (over 60 years of age) in FYROM, and their ability to maintain and preserve the oral health.

## Materials and Methods

This is a transversal study (cross-sectional study) which includes the knowledge and skills to maintain oral health in patients aged 60 years and older, who receive dental care in public health institutions - "Health Centre" and "Dental Clinical Centre" in Skopje, Clinic of Mouth and Periodontal Diseases. The study applied a same methodology as that used in a similar survey in Lithuania in 2009<sup>12</sup> in order to make a comparison of the findings for knowledge and attitudes toward preserving the oral health of older patients between FYROM and a state which is a member of the European Union. Testing was done by a questionnaire, which included issues related to oral health behaviour of old patients, their individual attention to oral health and obtaining dental services, as well as the sources of information related to the preservation and maintenance of oral health<sup>12,17,18</sup>.

The study population were patients older than 60 years who were treated in Public Health Facilities: "Health Centre" in Skopje and "Dental Clinical Centre", also in Skopje. The total number of patients who completed the questionnaire was 193 although the sample included 200 patients. The issues related to personal information about dental care and maintenance of oral health, frequency of tooth brushing, interdental cleaning, consumption of sugar and the use of fluoride in various forms were analysed. The questions were rated as: (1) "Yes, recently" - 2 points; (2) "Yes, before/earlier/some time ago" - 1 point; and (3) "Never" - 0 points. Account of points should theoretically range from 0-34 points.

All of the obtained data was put into a specially developed database. The study used  $\chi^2$  test for assessing differences in the frequency and the coefficient of correlation. Statistical significance was determined at  $p < 0.05$  (statistically significant results).

## Results

From all of the respondents (193), there were more women than men (Tab. 1). In terms of age, 54.92% were patients aged 60-69 years (106) and 45.08% (87) were patients aged 70 years and over. In relation to the frequency of tooth brushing, 33.7% of respondents used to wash their teeth once a day, and 34.9% of them were at the age of 60-69 years, while 32.2% of respondents were older than 70 years. More frequent tooth brushing, twice a day or more, was observed in 122 participants (63.2%), of whom 31.6% were males and 35.1% females (Tab. 1). A noticeable high percentage (6.9%) of the participants older than 70 years said that they never brush their teeth, while 25.4% of respondents stated that they brush their teeth just after the meal. Regarding the frequency of cleaning interdental space,

the majority of respondents stated that they don't have this habit, which especially applied to the participants older than 70 years. Regarding the use of paste enriched with fluoride, 27.9% of respondents said they always use toothpaste with fluoride and 34.7% answered that they almost always used. Among the respondents with higher education, only 28.9% of them used fluoride

toothpastes. Using a sugar in coffee or tea proved to be a common habit (Tab. 1). Regular visits to the dentist were recorded in 64.2% of the respondents, younger participants being more regular in that sense. Also, more of them were females. 68.1% of respondents with higher education said that they have a habit of going to the dentist for regular check-ups (Tab. 1).

Table 1. Maintaining of oral hygiene and health of elder people in FYROM

| Parameter                          | Frequency                 | Age                            |                          | Gender             |                       |
|------------------------------------|---------------------------|--------------------------------|--------------------------|--------------------|-----------------------|
|                                    |                           | 60-69 years<br>106<br>(54.92%) | 70+ years<br>87 (45.08%) | Men<br>79 (40.93%) | Women<br>114 (56.07%) |
| Tooth brushing                     | Once a day                | 37 (34.9%)                     | 28 (32.2%)               | 25 (31.6%)         | 40 (35.1%)            |
|                                    | Often                     | 69 (65.1%)                     | 53 (60.9%)               | 51 (64.6%)         | 71 (62.3%)            |
|                                    | Never                     | 0                              | 6 (6.9%)                 | 3 (3.80%)          | 3 (2.6%)              |
|                                    |                           | p=0.02*                        |                          | p=0.82             |                       |
|                                    | In the morning            | 96 (90.6%)                     | 73 (83.9%)               | 69 (87.3%)         | 100 (87.7%)           |
|                                    |                           | p=0.16                         |                          | p=0.94             |                       |
|                                    | In the evening            | 75 (70.7%)                     | 58 (66.7%)               | 56 (70.9%)         | 77 (67.5%)            |
| After a meal                       |                           | p=0.54                         |                          | p=0.62             |                       |
|                                    | Once a day                | 31 (29.3%)                     | 18 (20.7%)               | 22 (27.8%)         | 27 (23.7%)            |
|                                    |                           | p=0.17                         |                          | p=0.51             |                       |
|                                    | Once a day                | 8 (4.1%)                       | 1 (1.2%)                 | 4 (5.1%)           | 4 (3.5%)              |
|                                    | More often                | 6 (3.1%)                       | 0                        | 0                  | 6 (5.3%)              |
| Interdental cleaning               | Weekly                    | 9 (4.7%)                       | 5 (5.7%)                 | 3 (3.8%)           | 6 (5.3%)              |
|                                    | Rarely                    | 51 (26.4%)                     | 14 (16.1%)               | 21 (26.6%)         | 30 (26.3%)            |
|                                    | Never                     | 119 (61.6%)                    | 67 (77.1%)               | 51 (64.6%)         | 68 (59.6%)            |
|                                    |                           | p=0.0003**                     |                          | p=0.3              |                       |
|                                    | Always                    | 34 (32.1%)                     | 20 (22.9%)               | 21 (26.6%)         | 33 (28.9%)            |
| The Use of Fluoride Toothpastes    | Almost always             | 36 (33.9%)                     | 31 (35.6%)               | 32 (40.5%)         | 35 (30.7%)            |
|                                    | Weekly                    | 22 (20.7%)                     | 17 (19.5%)               | 21 (26.6%)         | 18 (15.8%)            |
|                                    | Rarely                    | 12 (11.3%)                     | 12 (13.8%)               | 2 (2.5%)           | 22 (19.3%)            |
|                                    | Never                     | 9 (4.7%)                       | 7 (8.1%)                 | 3 (3.8%)           | 6 (5.3%)              |
|                                    |                           | p=0.23                         |                          | p=0.005**          |                       |
| Using of sugar in coffee/tee       | No use                    | 50 (47.2%)                     | 33 (37.9%)               | 32 (40.5%)         | 51 (44.7%)            |
|                                    | 1-2 cubes/teaspoons       | 45 (42.5%)                     | 46 (52.9%)               | 40 (50.6%)         | 51 (44.7%)            |
|                                    | 2-3 cubes/teaspoons       | 11 (10.4%)                     | 6 (6.9%)                 | 5 (6.3%)           | 12 (10.5%)            |
|                                    | 4 or more cubes/teaspoons | 0                              | 2 (2.3%)                 | 2 (2.5%)           | 0                     |
|                                    | p=0.16                    |                                | p=0.22                   |                    |                       |
| Period since the last dental visit | Less than 1 year          | 72 (67.9%)                     | 52 (59.8%)               | 60 (75.9%)         | 64 (56.1%)            |
|                                    | 1-2 years                 | 19 (17.9%)                     | 20 (22.9%)               | 5 (6.3%)           | 34 (29.8%)            |
|                                    | 2-4 years                 | 11 (10.4%)                     | 6 (6.9%)                 | 8 (10.1%)          | 9 (7.9%)              |
|                                    | Over 4 years              | 4 (3.8%)                       | 9 (10.3%)                | 6 (7.6%)           | 7 (6.1%)              |
|                                    | p=0.18                    |                                | p=0.001**                |                    |                       |
| Regular visits to the dentist      | Yes                       | 36 (33.9%)                     | 16 (18.4%)               | 23 (29.1%)         | 29 (25.4%)            |
|                                    | No                        | 70 (66.1%)                     | 71 (81.6%)               | 56 (70.9%)         | 85 (74.6%)            |
|                                    | p=0.015*                  |                                | p=0.57                   |                    |                       |

Chi-square test: \* -  $p < 0.05$  \*\* -  $p < 0.01$

Concerning the level of education among the participants, the majority of respondents had secondary education - 46.6%. The level of education correlated to frequency of tooth brushing - if the level of education

was higher, the frequency of tooth brushing was higher. The largest percentage of respondents without basic education (23.1%) reported that they never brush their teeth (Tab. 2).

Table 2. Maintaining of oral hygiene and health of the respondents according to their level of education

| Parameter                          | Frequency                 | Level of education        |                           |                             |                          |
|------------------------------------|---------------------------|---------------------------|---------------------------|-----------------------------|--------------------------|
|                                    |                           | No education<br>13 (6.7%) | Primary ed.<br>43 (22.3%) | Secondary ed.<br>90 (46.6%) | Higher ed.<br>47 (24.3%) |
| Tooth brushing                     | Once a day                | 7 (53.8%)                 | 26 (60.5%)                | 23 (25.6%)                  | 9 (19.2%)                |
|                                    | More often                | 3 (23.1%)                 | 17 (39.5%)                | 64 (71.1%)                  | 38 (80.8%)               |
|                                    | Never                     | 3 (23.1%)                 | 0                         | 3 (3.3%)                    | 0                        |
|                                    |                           |                           | p=0.000**                 |                             |                          |
|                                    | In the morning            | 7 (53.8%)                 | 37 (86.1%)                | 85 (94.4%)                  | 40 (85.1%)               |
|                                    |                           |                           | p=0.0005**                |                             |                          |
|                                    | In the evening            | 6 (46.2%)                 | 17 (39.5%)                | 65 (72.2%)                  | 45 (95.7%)               |
|                                    |                           |                           | p=0.000**                 |                             |                          |
| Interdental cleaning               | After a meal              | 0                         | 14 (32.6%)                | 21 (23.3%)                  | 14 (29.8%)               |
|                                    |                           |                           | p=0.099                   |                             |                          |
|                                    | Once a day                | 0                         | 0                         | 2 (2.2%)                    | 6 (12.8%)                |
|                                    | More often                | 0                         | 0                         | 2 (2.2%)                    | 4 (8.5%)                 |
|                                    | Weekly                    | 0                         | 0                         | 5 (5.6%)                    | 4 (8.5%)                 |
|                                    | Rarely                    | 0                         | 0                         | 34 (37.8%)                  | 17 (36.2%)               |
|                                    | Never                     | 13 (100%)                 | 43 (100%)                 | 47 (52.2%)                  | 16 (34.1%)               |
|                                    |                           | p=0.000**                 |                           |                             |                          |
| The Use of Fluoride Toothpastes    | Always                    | 1 (7.7%)                  | 5 (11.6%)                 | 28 (31.1%)                  | 20 (42.5%)               |
|                                    | Almost always             | 1 (7.7%)                  | 8 (18.6%)                 | 43 (47.8%)                  | 15 (31.9%)               |
|                                    | Weekly                    | 0                         | 14 (32.6%)                | 13 (14.4%)                  | 12 (25.5%)               |
|                                    | Rarely                    | 6 (46.1%)                 | 15 (34.9%)                | 3 (3.3%)                    | 0                        |
|                                    | Never                     | 5 (38.5%)                 | 1 (2.3%)                  | 3 (3.3%)                    | 0                        |
|                                    |                           | p=0.000**                 |                           |                             |                          |
| Using of sugar in coffee/tee       | No use                    | 5 (38.5%)                 | 13 (30.2%)                | 36 (40%)                    | 29 (61.7%)               |
|                                    | 1-2 cubes/teaspoons       | 8 (61.5%)                 | 27 (62.8%)                | 44 (8.9%)                   | 12 (25.5%)               |
|                                    | 2-3 cubes/teaspoons       | 0                         | 3(6.9%)                   | 10(11.1%)                   | 4 (8.5%)                 |
|                                    | 4 or more cubes/teaspoons | 0                         | 0                         | 0                           | 2 (4.3%)                 |
|                                    |                           | p=0.011*                  |                           |                             |                          |
| Period since the last dental visit | Less than 1 year          | 0                         | 28 (65.1%)                | 64 (71.1%)                  | 32 (68.1%)               |
|                                    | 1-2 years                 | 8 (61.5%)                 | 9 (20.9%)                 | 18 (20%)                    | 4 (8.51%)                |
|                                    | 2-4 years                 | 0                         | 4 (9.3%)                  | 5 (5.6%)                    | 8 (17.1%)                |
|                                    | Over 4 years              | 5 (38.5%)                 | 2 (4.6%)                  | 3 (3.3%)                    | 3 (6.4%)                 |
|                                    |                           | p=0.000**                 |                           |                             |                          |
| Regular visits to the dentist      | Yes                       | 0                         | 3 (6.9%)                  | 32 (35.6%)                  | 17 (36.2%)               |
|                                    | No                        | 13 (100%)                 | 40 (93.1%)                | 58 (64.4%)                  | 20 (63.8%)               |
|                                    |                           | p=0.0003*                 |                           |                             |                          |

Chi-square test: \* -  $p < 0.05$  \*\* -  $p < 0.01$

With regards to the number of natural teeth present in the mouth, 48.2% of the total number of respondents had 1-15 natural teeth; of those 54.92% were aged 60-69

years and 45.08% were over 70 years of age 21 or more natural teeth were found in 12.9% of the total number of respondents, of whom 16.7% were women (Tab. 3).

Table 3. Preserved teeth of the respondents related to age, gender and level of education

| Parameter               | Nr    | Age                            |                           | Gender                      |                          |
|-------------------------|-------|--------------------------------|---------------------------|-----------------------------|--------------------------|
|                         |       | 60-69 years<br>106<br>(54.92%) | 70+ years<br>87 (45.08%)  | Men<br>79 (40.93%)          | Women<br>114 (56.07%)    |
| Number of present teeth | 0     | 18 (16.9%)                     | 32 (36.8%)                | 19 (24.1%)                  | 31 (27.2%)               |
|                         | 1-15  | 55 (51.9%)                     | 38 (43.7%)                | 40 (50.6%)                  | 53 (46.5%)               |
|                         | 16-20 | 20 (18.9%)                     | 5 (5.8%)                  | 14 (17.7%)                  | 11 (9.6%)                |
|                         | 21+   | 13 (12.3%)                     | 12 (13.8%)                | 6 (7.6%)                    | 19 (16.7%)               |
|                         |       | p=0.0025**                     |                           | p=0.13                      |                          |
| Level of Education      |       | No education<br>13 (6.7%)      | Primary ed.<br>43 (22.3%) | Secondary ed.<br>90 (46.6%) | Higher ed.<br>47 (24.3%) |
| Number of present teeth | 0     | 8(61.5%)                       | 14(32.6%)                 | 28(31.1%)                   | 0                        |
|                         | 1-15  | 5(38.5%)                       | 23(53.5%)                 | 43(47.8%)                   | 22(46.8%)                |
|                         | 16-20 | 0                              | 0                         | 10(11.1%)                   | 15(31.9%)                |
|                         |       | p=0.00001**                    |                           |                             |                          |

Chi-square test: \* -  $p < 0.05$  \*\* -  $p < 0.01$

## Discussion

In this research, the assessment of knowledge and attitudes concerning maintenance of oral health among elderly population, aged 60 years and over, in FYROM is presented. This was done on the basis of the answered the questionnaire. The age of respondents significantly corresponded to the frequency of tooth brushing and interdental cleaning, as well as to the habit of going to the dentist and doing regular check-ups. Respondents aged 70 years and older much more often than those aged 60-69 years said they had never cleaned their teeth ( $p < 0.05$ ). They also stated that they do not clean the interdental spaces very often ( $p < 0.01$ ), and do not go to regular dental visits ( $p < 0.05$ ). Gender of respondents in this age population has a significant effect on the use of fluoride toothpaste ( $p < 0.01$ ). Education level in patients over 60 years of age significantly affected their knowledge of the individual oral health care. The results show that respondents with higher levels of education brush their teeth more often (brush their teeth in the morning and evening), clean the interdental spaces, go to regular dental check-ups, and use fluoride toothpaste; they also said they do not use or use less sugar in their coffee or tea.

Brushing is the primary method for individual oral health care, which enables efficient level of dental plaque control, caries prevention and maintaining a healthy condition of the periodontal ligament<sup>19,20</sup>. Interdental tooth cleaning can be performed by dental floss or special interdental brushes for cleaning teeth, and is recommended once a day<sup>21,22</sup>. In industrialized countries, 40%-90% of seniors reported that they follow these recommendations<sup>23,24</sup>. The majority of respondents claimed that they use fluoride-enriched toothpaste<sup>25,26</sup>. The detrimental effect of using sucrose and refined sugar for oral health is well documented<sup>27</sup>. A general recommendation is to limit the intake of sugar, no more than 4 times daily, or to limit intake of simple sugars to less than 40 grams a day<sup>28</sup>.

The presence of natural teeth is the main indicator for oral health status among older people<sup>29,30</sup>. The presence of 20 or more teeth among the elderly indicates the existence of a functional dentition without the need of prosthetic rehabilitation if the condition of teeth aesthetically pleases the patient<sup>32</sup>.

In our research, 33.7% brushed their teeth once or twice a day (or several times per day), of whom 31.6% were men and 35.1% women. The results obtained in a similar study in Lithuania<sup>12</sup>, showed that 37% of the

respondents brushed their teeth once a day and 30% of respondents were brushing the teeth twice a day (39% of them were women and 23% men).

As the participants' level of education increased, they brushed their teeth more often: 71.1% of the respondents with secondary education and 80.8% with higher education said that they brush their teeth twice a day and more. Similar results were obtained in a study in Lithuania<sup>12</sup>, where 67% of respondents stated that they brushed their teeth twice per day and they were highly educated, compared to 11% who had only primary education and 26% with secondary education. The results from our study showed that 4.1% of all respondents were cleaning the interdental spaces once a day, in contrast to patients examined in the Lithuanian study, where the percentage was 19%. Regarding the use of fluoride toothpastes, 27.9% of all our respondents stated that they always used fluoride toothpaste, whereas 57% of respondents in Lithuanian research said that they used fluoride toothpaste and most of them were aged 60-69 years (67%) and with higher levels of education (87%).

The use of sugar in coffee or tea proved to be a custom among men and women: from the total number of respondents, 38.5 drank coffee or tea without sugar and 40% of that refers to men and 61.7% to women. In Lithuania<sup>12</sup>, coffee or tea with 1 cube or teaspoon of sugar drank 26% of respondents and with 2 cubes or teaspoons of sugar drank 46% of respondents. Regular dental visits were recorded in 64.2% of respondents, mostly in younger of them (60-69 years), more often among women. 68.1% of respondents with higher education said that they had a habit of going to the dentist for dental control.

The number of teeth present in the mouth significantly associated with age and level of education among respondents, while it was not significantly associated with gender. From all of the respondents, 48.2% had 1-15 natural teeth, and 21 or more natural teeth was recorded in 12.9% of the total number of respondents. The results obtained in the Lithuanian study<sup>12</sup> showed that 40% of their respondents had 1-15 natural teeth and 25% had 21 or more teeth. Wearing removable dentures, very significantly depends on the level of education, considering the significantly lower number of respondents with no education, who wear removable dentures. From all of the subjects, who were included in our study, 59.6% were wearing removable dentures in both jaws, unlike the respondents in the study of Lithuania<sup>12</sup>, where 32% of respondents said that wore removable dentures in both jaws.

A similar study, which aimed to investigate oral health behaviour, knowledge and ability of maintaining oral health among persons aged 35-44 years and 65-74 years, was made in China<sup>33</sup>. The results indicated that 32% of people in the age group of 35-45 years and 23% of the respondents aged 65-74 years, were washing their teeth twice a day, but only 55% of them used fluoride

toothpaste. Annual dental visits were registered in 25% of the total number of respondents, while only 6% were on a check-control to the dentist in the last 2 years. Significant differences in the maintenance of oral health were found among respondents from urban areas and provinces. 43% of respondents, aged 35-44 years, consumed sweets every day. Knowledge about the causes of dental diseases and their prevention was low<sup>33</sup>.

Oral health status in older people is reflected as a result of oral-health behaviour, oral diseases and their treatment during life. Preservation as many as possible natural teeth in elderly, will be a major challenge for dentists to preserve their teeth and oral health with a greater professional care<sup>34-37</sup>.

## Conclusion

By realizing the objectives set and based on the obtained findings, the following conclusions can be drawn:

1. Greater care for one's oral health is correlated with a higher level of knowledge and attitudes about oral health care and is in accordance with the recommendations for oral care and maintenance of oral health by the dentists;
2. Improved oral health behaviour and knowledge about oral health care is connected with the presence of a large number of natural teeth in the elderly;
3. Encouraging is the fact that a significant number of older people are brushing their teeth twice a day and also take a relatively good oral health care;
4. Oral health behaviour of elderly people, aged over 60 years, in FYROM is worse than in the industrialized countries, which is reflected in the small percentage of preserved natural teeth in the mouth. Based on the knowledge and attitudes of personal oral health care, we can modify the knowledge and provide a variety of dental treatments from different areas of dentistry, including advice on personal hygiene and maintenance of oral health.

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Correspondence and request for offprints to:

Meri Šapurić  
 Teodosij Gologanov Str, bb  
 1000 Skopje, FYR Macedonia  
 E-mail: [sapurik\\_meri@yahoo.com](mailto:sapurik_meri@yahoo.com)