

**post-brushing rinsing behavior among dental and medical students at rudn university: a cross-sectional observational study**

**Academic supervisor – Каверина Елена Валерьевна**

*Мирвакили Сейедех Афаз*

*Student (bachelor)*

Peoples' Friendship University of Russia named after Patrice Lumumba, Медицинский факультет, Москва, Россия

*E-mail: [afaqmirvakili@gmail.com](mailto:afaqmirvakili@gmail.com)*

post-brushing rinsing behavior among dental and medical students at rudn university: a cross-sectional observational study

Mirvakili S.A, Darvish Hosseini A

5th year student

Russian University of the Friendship of Peoples named after Patrice Lumumba (RUDN), Faculty of Dentistry, Moscow, Russia

E-mail: <mailto:1032218577@rudn.ru>, <mailto:1032218227@rudn.ru>

Introduction. Maintaining good oral hygiene is essential for preventing dental caries, and the use of fluoridated toothpaste remains the most widespread and effective method [1]. However, the effectiveness of fluoride is influenced by user-related factors, particularly post-brushing rinsing behavior. Current evidence indicates that rinsing the mouth with water immediately after toothbrushing washes away concentrated fluoride, reducing its topical effect and diminishing protection against dental caries [1, 2]. A recent systematic review of clinical practice guidelines confirmed that "fluoride toothpaste is less effective if followed by rinsing with water" [2]. Dental students receive comprehensive training in oral hygiene and are expected to model optimal preventive behaviors for their future patients. Nevertheless, it remains unclear whether this theoretical knowledge translates into correct personal practice regarding post-brushing rinsing.

Objective. To determine the proportion of dental and medical students at RUDN University who rinse their mouths with water after toothbrushing and to compare the behavior between the two groups.

Materials and Methods. In February 2026, a cross-sectional observational study was conducted at RUDN University. Fifty students voluntarily participated: 25 fourth- and fifth-year dental students and 25 third-year medical students. Each participant was provided with a toothbrush and fluoride toothpaste and was asked to brush their teeth as they normally would, with no prior warning that post-brushing behavior would be observed. The researcher discreetly recorded whether each participant rinsed their mouth with water after completing brushing.

Results. Among the 50 students observed, post-brushing rinsing behavior differed between the two groups. In the dental student group (n=25), only 3 participants (12%) did not rinse their mouths after brushing, while 22 participants (88%) rinsed with water. In the medical student group (n=25), only 1 participant (4%) refrained from rinsing, while 24 participants (96%) rinsed. Overall, across both groups, 46 students (92%) rinsed their mouths after toothbrushing, and only 4 students (8%) followed the recommended practice of not rinsing.

Conclusions. The vast majority of both dental and medical students at RUDN University rinse their mouths with water after toothbrushing, contrary to current evidence-based recommendations [1, 2]. Despite receiving specialized training in oral health, dental students showed only marginally better compliance (12%) than medical students (4%). These findings reveal a substantial gap between professional knowledge and personal practice, highlighting the need to incorporate explicit instruction on post-brushing behavior into dental and medical curricula to ensure that future healthcare providers model optimal preventive behaviors for their patients.

### **Источники и литература**

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