Prevalence of *H. pylori* among medical employees in Russia and their willingness to undergo eradication therapy

Bordin D.S.

Plavnik R.G.

Nevmerzhitskiy V.I.

Butorova L.I.

Abdulkhakov R.A.

Abdulkhakov S.R.

Embutnieks Yu.V.

Voynovan I.N.

1 Moscow clinical scientific center named after A.S. Loginov, Moscow, Russia

2 Peoples Friendship University of Russia, Moscow, Russia

3 Moscow Institute of Physics and Technology, Moscow, Russia

4 First Moscow State Medical University named after I.M. Sechenov, Moscow, Russia

5 Kazan State Medical University, Kazan, Russia

6 Kazan Federal University, Kazan, Russia

**Objective.** To study the prevalence of *H. pylori* among medical employees in Russia and their willingness to undergo eradication therapy.

**Patients and methods.** 187 medical employees in cities of Russia (Moscow and Kazan) were examined. The main group included 138 doctors of different specialties (median age - 37.9±11.5 years). Control group included 49 students of medical university (median age 22.4±1.9 years). All participants were tested using 13C-urease breath test ("Helikarb" test kit with 50 mg of 99% enriched 13C-carbamide, "IRIS.Doc", Kibion infrared analyzer). Exclusion criteria were: taking of PPIs or antibiotics during the past 30 days. *H. pylori*-positive medical employees were interviewed to find out their willingness to undergo the eradication therapy.

**Results.** *H. pylori* was detected in 53.6% of cases in the main group (males 48.5%, females 55.2%), and in 34.7% in the control group (p=0.05) (Picture 1). The rate of *H. pylori*-positive physicians was higher among endoscopists (61.5%), general practitioners (59.1%) and medical managers (59.1%), however, it was lower among gastroenterologists (47.6%) and clinical laboratory physicians (40.0%).

We observed the increase of *H. pylori*-positive rates with age of participants: in the age group of 21-30 years (median age 27.7, n=37) 40.5% doctors were infected while; in age of 31-40 years (median age 36.0, n=36) - 44.4%, in age of 41-50 years (46.9, n=30) - 56.7%, in age of 51-60 years (54.4, n=22) - 68.2%, and in the age group of 61+ (65.9 years, n=7) - 85.7% (Picture 2 a, b).

Only 35 out of 57 (61.4%) *H. pylori*-positive doctors wished to undergo eradication therapy.

**Conclusion.** *H. pylori* positive rate was 1.5 times higher in doctors than medical students. *H. pylori* infection rate increased with age. The observed results reflect the role of the professional factor as risk factor of *H. pylori* infection. Surprisingly, only 2/3 of the medical employees agreed to take eradication therapy.