The frequency and profile of lipid lowering treatment in a contemporary Russian population

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Background: Despite of guidelines for management of dyslipidemias (DLP) and the availability of effective and safe lipid lowering drugs (LLD), about one half of CVD patients do not reach the target lipid levels. The knowledge on DLP management in Russian population is limited.

Objective: To analyze the frequency and profile of LLD therapy in subjects with DLP and cardiometabolic diseases in a contemporary Russian population.

Methods: A random population sample of men and women 55–84 years old (n=3898) was examined in 2015–17 in the Russian arm of the HAPIEE project. A composite dysmetabolic group included DLP (total cholesterol, TC $\geq$5 mmo/l or low-density lipoprotein cholesterol, LDLC $\geq$3 mmol/l or triglycerides, TG $\geq$1.7 mmol/l) and/or coronary heart disease (CHD) and/or diabetes mellitus type 2 (DM2). Regular medication intake for 12 months was coded by ATC.

Results: In studied population sample 88% of subjects had dysmetabolic disorders (DLP - 83.1%, CHD - 14.9%, DM2- 20.8%); among them 32.8% subjects received LLD therapy (21.2% in men vs. 39.4% in women, $p<0.001$) and 17.1% did not report the status of LLD receiving. The frequency of LLD use in CHD group was 48,3%, in DM2 – 35,0%, in DLP – 29.4%. Among named LLD, statins were predominantly used (98%). Lipids control was achieved among subjects with CHD in 18.3% (37.9% among those receiving LLD); among DM2 - in 9.0% (25.6%); among DLP without CHD or DM2 – in 7.3% (24.8%).

Conclusion: In an urban population sample aged 55–84 examined in 2015–17, more than one half of subjects with dysmetabolic disorders (CHD, DM2, DLP) did not receive LLD. Among those receiving lipid-lowering therapy, the lipid control was achieved in about 40% of participants with CHD, and in every forth participant with DM2 or DLP. The lack of lipid control is likely to contribute high rate of atherosclerotic CVD in studied population.