**Key words:** obesity, arterial hypertension, overweight, prevalence

**Purpose:** Subanalysis of the prevalence and detection of hypertension among the cohort of respondents with overweight and obesity, depending on the degree and type of obesity in a large population within the definition of risk factors in our research of Ukraine on urban population in 2009-2013.

**Methods:** The study protocol included the definition and evaluation of the 20 factors of cardiovascular risk of 1000 respondents (468 men and 532 women) at the age 30-69 years living in 5 regions of Dnipropetrovsk and Subanalysis contained in this publication concerned the prevalence and detection of arterial hypertension, depending on the degree and type of obesity. The following methods were used in this research: body mass index (BMI), waist circumference (WC), monitoring blood pressure, fast levels glucose, insulin, with definition of an index of HOMA, blood lipid profile.

**Results:** The population study conducted that the hypertension was detected in 45.7% of patients, the gender distribution in 37.6% of men and 52.8% women. Among surveyed with normal body weight (291 people), hypertension was diagnosed in 87 respondents is 29.8%. It was noted a progressive increase of the detection of hypertension in respondents with normal weight at this aspect. Thus, the respondents at the age group of 30-39, who included 97 respondents of hypertension were detected in 14 people, which is 14.4%; aged 40-49, who included 65 respondents, hypertension was diagnosed in 17 people, which is 26.2%; at the age group of 50-59 years were registered 90 respondents, among them 36 people had hypertension, which is 40.0% and at the age of 60-69 years, which included 39 respondents, 20 registered hypertension, which is 51.3%. Among those overweight (383 respondents), 180 respondents were identified hypertension, which is 46.9%. In 30-39 years, among the 90 respondents hypertension was detected in 28 people, which is 31.1%; at the age cohort 40-49, which included 95 respondents registered in 38 hypertension, that is 40.0%; at the age group 50-59 years, which included 130 people, 67 found hypertension, which is 51.2%; and at the age of 60-69 years, which included 68 respondents, 47
identified hypertension, which is 69.5%. Among people with obesity I degree (234 respondents), in 146 surveyed revealed hypertension, which is 62.3%. at the 30-39 age group, which included 40 people found hypertension in 17, which is 42.5%; at the age of 40-49 years, which included 49 respondents, 21 registered hypertension, which is 42.0%; at the age group 50-59 years, which came 101 respondents, 71 identified hypertension, which is - 69.6%; and at the age of 60-69 years, which consisted of 45 people in 37 diagnosed hypertension, therefore, the prevalence of hypertension reached 82.2%.

Among people with obesity degree II-III (92 respondents), 69 registered hypertension, which is 75.0%. Respondents with obesity II-III degree at the age group of 30-39, which included 14 people, hypertension was diagnosed in 9 respondents is 60.0%; at the age of 40-49 years, the cohort which came 21 respondents, 15 identified hypertension, which is 71.4%; in the age group 50-59 years, which includes 41 people, 30 registered hypertension, which is 73.1% and in the age group 60-69 years, which consisted of 16 people, was registered in 15 hypertension, that the prevalence of hypertension reached 93.7%. With increasing age, body weight and an increase in the overall detection rate of hypertension in the population. A similar analysis conducted on the basis of gender differences, and in groups of overweight and different degrees of obesity. We analyzed the detection of hypertension in urban population Ukraine according to the type of obesity. The results were analyzed according to the type of abdominal obesity defined by the criteria AHA (2013) and ESC (2012).

Conclusions: We have determined that analyzed urban population of Ukraine's population had a normal body weight only 29.3% of the population and 70.7% had total overweight and obesity of I-III degrees. It was observed the trend of increasing prevalence of overweight and obese subjects with the age among both men and women. It was found that weight gain and age increases detection of hypertension in the population. The percentage of detection of hypertension in the population increased from 29.8% at normal body weight to 75% for obesity of the II-III degrees. Revealed that regardless of sex, appearance and progression of
abdominal type of obesity associated with increased detection of hypertension. Thus, according to the Recommendations ESC (2012), women with WC > 80cm hypertension were detected in 57.2% of men with WC > 94cm at 44.1%. According to the AHA criteria (2013) among women with WC > 88cm hypertension was detected in 63.6% of men with WC > 102cm to 47.3% respectively.