Objectives To study the influence of depression (D) on relative risk of myocardial infarction (MI) and stroke in women aged of 25–64 years during 16 years of follow up in Novosibirsk.

Methods Within the WHO ‘MONICA-psychosocial’ (MOPSY) programme random representative sample of women aged 25–64 years who were residents of one district in Novosibirsk, were surveyed in 1994. D was measured at the baseline examination by questionnaire ‘MOPSY’. The registration of MI incidence during 16 years (1995–2010) was performed with using of Myocardial Infarction Registry data. Registration of stroke incidence was being made during dynamic following under the cohort of women. Cox proportional regression model was used for an estimation of relative risk (HR) of MI, stroke. Women having heart diseases or cerebrovascular events at the baseline were not included in the analysis.

Results Prevalence of D in studied cohort revealed was 54.3%. During 16 years of study (1995–2010) MI was developed in 2.2% of women, stroke—in 5.1%. Rate of D in women with developed MI was 75%, in women with stroke—it was 60%. Relative risk of MI development in women having D was in 2.5-times higher (HR=2.53; 95% CI 1.26 to 24.34; p<0.05), and risk of stroke was
more than 4-times higher (HR=4.63; 95% CI 1.03 to 20.89; p<0.05) compared women without D.

**Conclusions**  There is high prevalence of D in Russian female population aged 25–64. During 16 years of study women with D have significantly higher risk of MI and stroke than without D.