

## **Lack of social support and risk of an arterial hypertension in Russia/Siberia: gender features. MONICA-psychosocial epidemiological study**

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### **Abstract**

**O**bjective: To determine the gender differences in the effect of social support on the risk of arterial hypertension in general population aged 25–64 years in Russia/Siberia.

Methods: Under the third screening of the WHO MONICA-psychosocial program (MOPSY) random representative sample including both genders aged 25–64 years was surveyed in Novosibirsk in 1994 (n=1346, 48.8% males; mean age 44,9 ± 0,4 years). Indices of close contacts (ICC) and social relations (SNI) were evaluated at the baseline by Berkman-Syme test. New-onset arterial hypertension (AH) incidences were identified over 20-year (1994-2014yy) of follow-up in cohort.

Results: The prevalence of low ICC levels was higher in men compared to women (63.9% and 57.1%, respectively); the prevalence of low SNI levels was higher in women compared to men (77.7% and 43%, respectively). The risk incidence of hypertension over the first 5 years of follow-up was equally high in both men and women with low ICC. It was 2-fold higher compared to those with middle and high ICC levels (p<0.05). There were no statistically significant results over 5 years in women with low SNI. But risk of AH was 3-fold higher in men with low SNI over 5 years. Risk of AH was significantly higher in women with low values of SNI over 10 years of follow-up and it was 1.88 (p<0.05). As well as there was a tendency only in AH risk in males (HR=1.43 p>0.05). The long-term trends of 15 and 20 years of follow-up indicate a significant increase in the risk of hypertension in women with low social support (ICC – HR=1.42; SNI – HR=1.58 p<0.05) but males had no risk incidence.

Conclusions: It was found male more often have low level of ICC than female. There is opposite pattern with SNI at the same time. There are no gender differences in AH risk over first 5 years of follow-up in those with low ICC. Male with low SNI have a higher risk over 5 years and female have higher risk over 10 - 20 years of follow-up.

### **Recent publications:**

1. Gafarov V.V., Gromova E.A., Gagulin I.V., Panov D.O., Krymov E.A., Gafarova A.V. Trends in attitudes towards the prevention of cardiovascular diseases, awareness, and attitudes to one's health in 1984—2016 among men of 25 to 44 years old in Russia/Siberia. The Russian Journal of Preventive Medicine. 2020;23(2):41-46. (In Russ.).  
<https://doi.org/10.17116/profmed20202302141>

2. Gafarov V, Panov D, Gromova E, Gagulin I, Gafarova A. The Risk of Hypertension Over 16 Years and Family and Job

Stress in Female Population 25 - 64 Years in Russia/Siberia. EC Cardiology. 2017;3(1):05-13.

3. Gafarov V., Panov D., Gromova E., Gagulin I., Gafarova A. Trait anxiety, awareness, health attitudes and 16-year hazard

ratio of acute cardiovascular disease in open female population in Russia. International Journal of Medicine and Medical Sciences. 2014; 4 (1): 030-034.

4. V. Gafarov, D. Panov, E. Gromova, I. Gagulin, A. Gafarova. The influence of depression on risk development of acute cardiovascular diseases in the female population aged 25-64 in Russia. Int J Circumpolar Health 2013; 72: 1-5

5. V. Gafarov, D. Panov, E. Gromova, I. Gagulin, A. Gafarova. The influence of social support on risk of acute cardiovascular diseases in female population aged 25-64 in Russia// Int J Circumpolar Health 2013; 72: 1-4.

### **Biography**

Valery Gafarov, in 1974 - MD (Novosibirsk medical university). 1980 - PhD, theme Epidemiological studying Acute Myocardial Infarction in conditions of large industrial center of Western Siberia. 1991 - MPH; 2003 - professor on a specialty cardiology; 2003 - present time – head of collaborative laboratory of epidemiology cardiovascular diseases and Laboratory of psychological, sociological aspects of therapeutic diseases of Research Institute of Internal and Preventive Medicine. The author of 758 scientific publications (articles and abstracts), from them 6 monographs.

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