

### Future projects and plans

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NCD EG Chair

20 (10) NCD EG Meeting on the 20th, November 2020

### NCD expert group 2020



Continuing the general line and traditions in NCDs projects (prevention and improvement of its control)

Addressing new trends and renewal of the activities as an answer on the challenges of 2020

## Proposal: joint epidemiology survey performed by the same methodology in ND countries



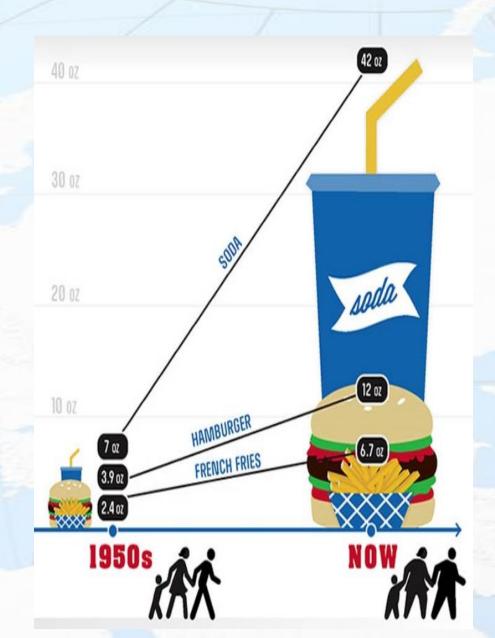
- 1. Evaluation of the prevalence of chronic non-communicable diseases, risk factors, increased risk
- 2. Evaluation of the risk factor dynamics among the population
- 3. External evaluation of the effectiveness and quality of work in PHC

Epidemiology survey performed by same methodology in ND countries which will allow to compare risk factors and evaluate the association between socio-economic parameters, climate and environmental factors, lifestyle and metabolic factors.

#### Obesogenic environment

- Decreased physical activity
   & Increased stress
- Fast food consumption, sugary beverages, snacks, and portion sizes.
- Biological predisposition
- Media Manipulation
- Promotion of energy-dense foods

Establishing and maintaining healthy eating practices from an early age, focusing on smaller portions of nutritious, non-energy-dense foods that can be an important part of a comprehensive approach to reduce the risk of overweight and obesity among children.

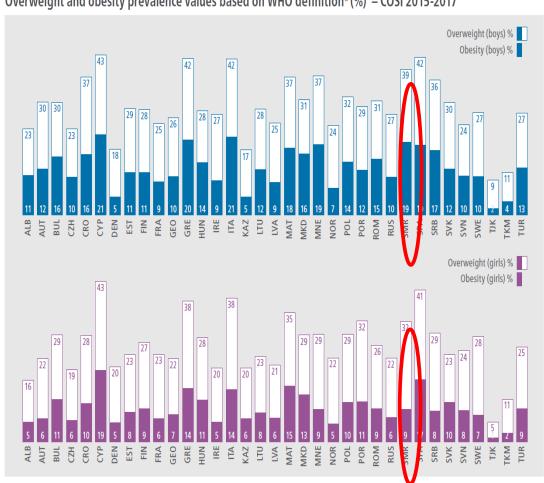


#### CHILDHOOD OBESITY **SURVEILLANCE INITIATIVE**



### Overweight and obesity among children aged 6-9 years

Overweight and obesity prevalence values based on WHO definition<sup>a</sup> (%) – COSI 2015-2017



#### A major indicators:

- >Weight and height measurements
- > Age
- > Eating habits
- >Physical Activity
- >Sedentary Behaviors

More than 300 000 children 12 countries

## Karelia: history of joint projects in Russia and Finland



#### Health in all ages – Healthy schools



Joint project in the Karelia region and other ND countries aimed:

- to investigate the health of the school-age children (for example using elements of COSY methodology)
- to implement interventions, aimed to improve lifestyle, involvement of the families and using the experience of North Karelia project

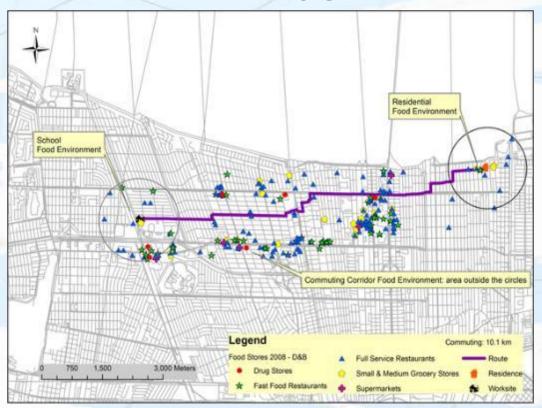
### **Neighborhood Environment**



- A part of the environment with a certain radius from a place of residence, for example, 400 m.
- It affects the components of lifestyle: physical activity, nutrition, stress level, etc.
- Studied: the number and density of certain objects (shops, restaurants, sports grounds, etc.).

# Map of sale points of food for the analysis of the association between food environment and body mass index





The number of supermarkets in the area of residence was significantly associated with body weight, and the number of full service restaurants was inversely associated with body weight.

Each additional point of fast food sale per 1 km of the track (home-work, homeschool) was associated with an increase in body weight

Dornelles A (2019) Impact of multiple food environments on body mass index. PLOS ONE 14(8): e0219365. https://doi.org/10.1371/journal.pone.0219365

# Proposal: the similar study on the characteristics of Neighborhood environment



Density of the different types of food stores, markets, fast-food points, restaurants, tobacco shops, alcohol shops and etc.

Link between population lifestyle (epidemiology survey) and neighborhood environment

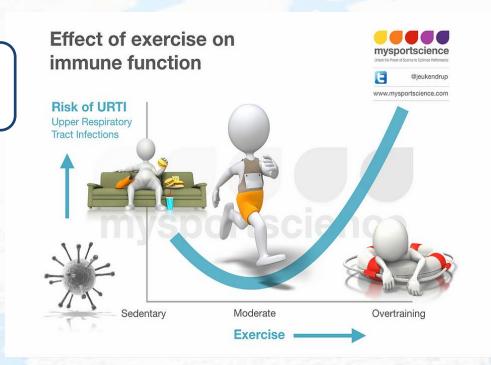
Guidelines for public health programs and activities in the regions aimed to improve neighborhood environment

# Impact of PA on immunity and susceptibility to respiratory infections: importance during a pandemic



### MODERATE PHYSICAL EXERCISE:

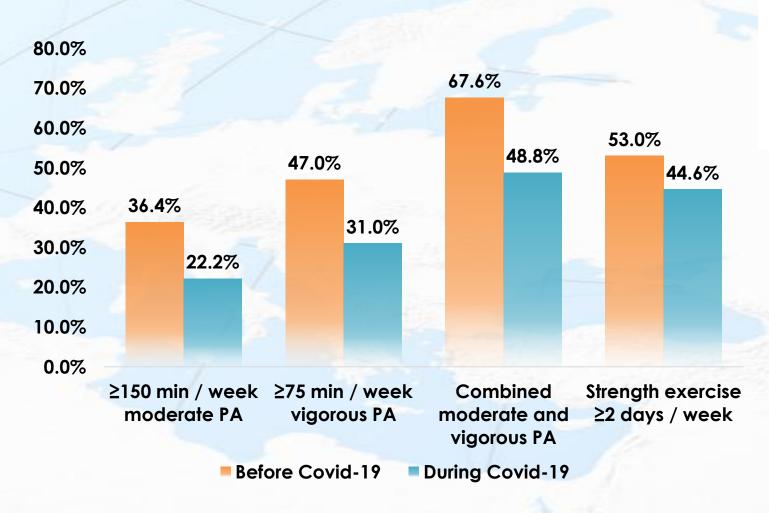
- Stimulating and strengthening effect on the immune system;
- J-dependence of the frequency of infectious diseases on the intensity of training;
- Reducing of chronic inflammation among physically active people



Simpson RJ, Campbell JP, Gleeson M, Krüger K, Nieman DC, Pyne DB, Turner JE, Walsh NP. Can exercise affect immune function to increase susceptibility to infection? Exerc Immunol Rev. 2020;26:8-22. PMID: 32139352.

# Decrease of all types of physical activity during the spring 2020 in the Russian Federation

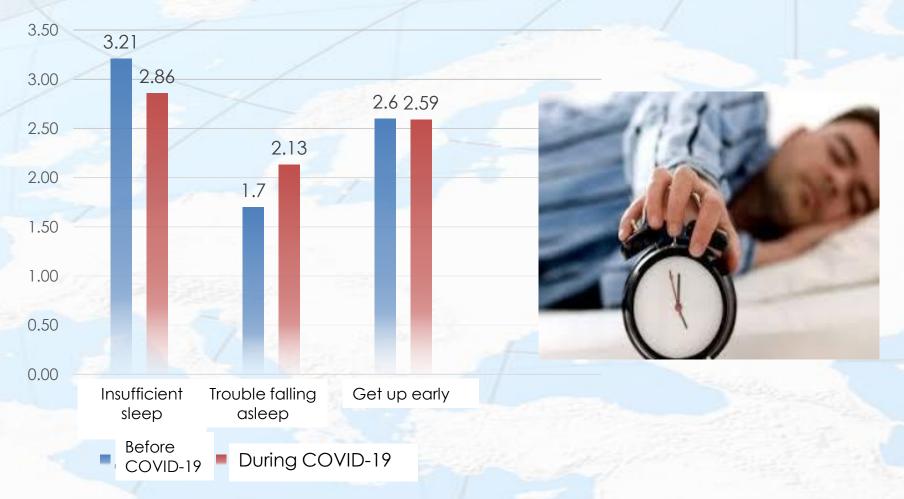








### SLEEP CHANGES DURING THE COVID-19 PANDEMIC: LONGER DURATION, POOR QUALITY



Average number of days per week before and during COVID-19

# Proposal: the similar on-line survey evaluating the impact of COVID on the lifestyle of population



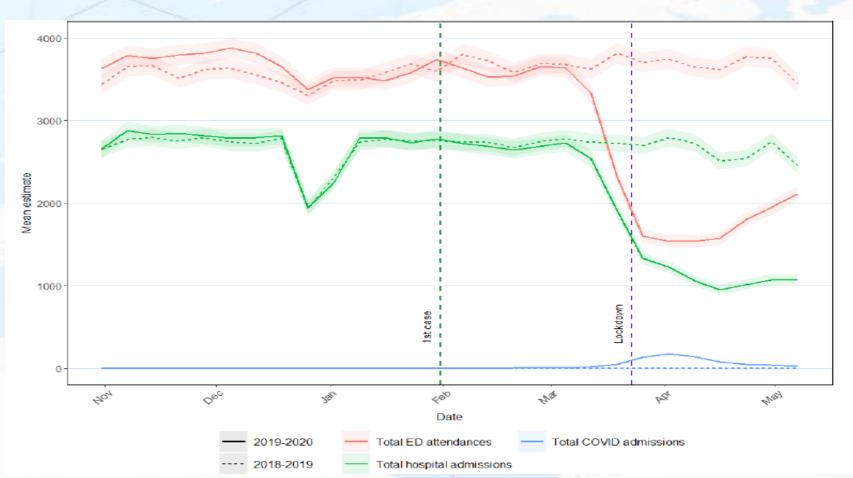
- Physical activity changes
- Dietary behavior changes (the frequency of meals, the type of the products)
- Weight changes
- Drinking and smoking habits changes
- Emotional status changes



ORIGINAL RESEARCH

### Monitoring indirect impact of COVID-19 pandemic on services for cardiovascular diseases in the UK





#### **Guidelines**

- •Currently, treatment of COVID-19 patients after the first three weeks is based on limited evidence
- Approximately 10% of people have a prolonged period of illness after COVID-19
- Many of these patients recover spontaneously (slowly) with comprehensive support, adherence to work and rest, symptomatic treatment, and a gradual increase in physical activity
- Home pulse oximetry can be helpful in breath monitoring
- Indications for specialized care include clinical respiratory, cardiac, or neurologic symptoms (new, persistent, or progressive)

#### Health promotion and prevention of chronic noncommunicable diseases during the pandemic and selfisolation (Consensus of Experts from NMIC TPM and ROPNIZ)

- Hygienics and prevention of infection
- Guidelines on nutrition during the pandemic and self-isolation
- Guidelines on physical activity during the pandemic and self-isolation
- Guidelines on smoking cessation during the pandemic and self-isolation
- Guidelines on alcohol consumption limitation during the pandemic and self-isolation
- Guidelines on maintaining psycho-emotional health during the pandemic and self-isolation
- Mobile healthcare during the pandemic and self-isolation

Кардиоваскулярная терапия и профилактика. 2020;19(3)

Укрепление здоровья и профилактика хронических неинфекционных заболеваний в условиях пандемии и самоизоляции. Консенсус экспертов Национального медицинского исследовательского центра терапии и профилактической медицины и Российского общества профилактики неинфекционных заболеваний

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Health promotion and prevention of chronic non-communicable diseases in the context of the COVID-19 pandemic. Consensus of experts of the National society of evidence-based pharmacotherapy and the Russian society of the prevention of non-communicable diseases

Drapkina O. M., Gambaryan M.G., Gorny B. E., Karamnova N. S., Kontsevaya A. V., Novikova N. K., Popovich M. V., Rybakov I. A., Kalinina A. M. National Medical Research Center for Therapy and Preventive Medicine, Russian Society of the Prevention of Non-Communicable Diseases.

Key words: expert consensus, chronic non-communicable diseases. prevention, pandemic, risk factors, isolation.

Drapkins O. M. ORCID: 0000-0002-4453-8430, Gambaryan M. G. ORCID: Kalinina A. M. Health promotion and prevention of chronic non-commu-0000-0003-4018-8845. Gorny B.E. ORCID: 0000-0002-9589-0186. nicable diseases in the context of the COVID-19 pandemic. Consensus 0003-2212-1420, Kalinina A.M. ORCID: 0000-0003-2458-3629

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### Primary care services for NCD



- Assessing the impact of the COVID-19 on the delivery of primary care services for NCDs
- Guidelines for primary care delivery in new world, including the post-covid patients with NCD

### New proposals for NCDs group

- Epidemiological survey based on the same principles in ND countries
- Health in all ages Healthy schools (in Karelia region with Finland and other countries)
- Neighborhood environment study (jointly with epidemiological survey allows to study a wide range of associations)
- On-line survey of evaluation of the impact of COVID-19 on the lifestyle
- NCDs in primary care and COVID-19 (access to care and guidelines)

