

Exercise in Medicine in Russia

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Summary

Noncommunicable diseases, mainly cardiovascular diseases and cancers, and external causes account for more than 80% of mortality in Russia. The leading causes of death and disability are directly associated with behavioural risk factors, physical inactivity being one of them. Until a few years ago, a clear standard recommendation on physical activity (PA) counselling for general practitioners did not exist in Russia. In 2010, the guidelines on physical activity counselling for primary health care providers were developed. On the basis of these guidelines the national recommendations on PA were developed in 2011. They were included in the national recommendations on Cardiovascular Prevention of the Society of Cardiology of the Russian Federation. In 2012 the guidelines were adopted by the Ministry of Health of the Russian Federation and recommended to primary health care providers of all Russian regions. One of the reasons why primary health care providers are not involved enough in counselling their patient regarding a healthy lifestyle – PA as well as smoking, healthy nutrition or other habits – is that these consultations are not covered by health insurance companies. Other barriers are the absence of the topic of a healthy life-style in pre-graduate and post-graduate curricula of medical universities as well as limited counselling skills in physicians. In 2011 an educational training course for primary health providers based on the guidelines described above was established by the National Research Centre for Preventive Medicine. The further implementation of the PA recommendations depends on the one hand on their inclusion in the curricula of medical universities and on the other hand on the creation of ways for involving and motivating primary health care providers to counsel patients in this area.

Keywords: Physical activity, healthcare, counselling, chronic disease, prevention, Russia

Zusammenfassung

Nichtübertragbare Krankheiten, insbesondere kardiovaskuläre Erkrankungen und Krebs, sowie äussere Einflüsse sind für mehr als 80% der Mortalität in Russland verantwortlich. Die wichtigsten Ursachen für Todesfälle und Behinderungen hängen direkt mit verhaltensbedingten Risikofaktoren zusammen, dazu gehört auch die körperliche Inaktivität. Bis vor wenigen Jahren gab es in Russland keine standardisierten Bewegungsempfehlungen. 2010 wurden die Richtlinien für Bewegungsberatung durch medizinische Grundversorger entwickelt, auf dieser Basis wurden 2011 auch nationale Bewegungsempfehlungen herausgegeben. Diese wurden auch in die Empfehlungen der russischen Gesellschaft für Kardiologie für die Prävention kardiovaskulärer Erkrankungen aufgenommen. 2012 wurden die Empfehlungen vom russischen Gesundheitsministerium aufgenommen und für die medizinische Grundversorgung in allen Regionen Russlands als gültig erklärt. Die Grundversorger engagieren sich bis heute noch nicht genügend in der Bewegungsberatung; ein Grund dafür ist, dass Beratungen zu einem gesundem Lebensstil – Bewegung, Nichtrauchen, gesunde Ernährung und andere Verhaltensweisen – durch Krankenversicherer nicht vergütet werden. Zudem fehlt das Thema «gesunder Lebensstil» in Curricula der Aus- und Weiterbildung der medizinischen Universitäten und die Beratungskompetenzen der Grundversorger sind noch begrenzt. 2011 wurde durch das Nationale Forschungszentrum für Präventivmedizin ein Ausbildungskurs für Grundversorger ins Leben gerufen. Die weitere Umsetzung der Umsetzungsrichtlinien hängt einerseits von deren Integration in die Ausbildung angehender Mediziner ab und andererseits davon, ob und wie es gelingt, die praktizierenden Grundversorger in die Thematik der Bewegungsberatung einzubeziehen und sie entsprechend zu motivieren.

Schlüsselwörter: Physical activity, healthcare, counselling, chronic disease, prevention, Russia

Prevailing health issues and risk behaviours

During the last two decades the mortality rate increased in the Russian Federation from 11.9 per 1000 in 1990 to 15.7 per 1000 in 2003 (*figure 1*). At the same time, the birth rate declined from 13.5 per 1000 to 10.1 per 1000. Since 2003 mortality is declining again, but still remains significantly higher than in other parts of Europe. In 2010, life expectancy at birth was 14 years lower for Russian men than for men in the European Union (*figure 1*). Noncommunicable diseases, mainly cardiovascular diseases and cancers, and external causes account for more than 80% of the mortality of Russians. Cardiovascular diseases are the leading cause of premature death in men with about half of all cases as well as in women with about two thirds of all cases. The second ranking causes for premature mortality are external causes in men and cancers in women (source: Mortality indicator data-base (HFA-MDB) of the World Health Organization Regional Office for Europe, updated: April 2014; www.euro.who.int).

The leading causes of death and disability in the Russian population are directly associated with behavioural risk factors. Low levels of physical activity (PA) are an important one. A behavioural risk factor surveillance system does not exist in Russia, but several surveys on physical activity behaviour of the population have been conducted during the last decade. From 2000 to 2002 three Russian cities (Moscow, St. Petersburg and Tver City, located between the other two) conducted a random-sample survey using the International Physical Activity Questionnaire (IPAQ) (Zabina et al, 2002). In this study, less than 15% of residents reported low levels of physical activity (*figure 2*). At the same time, it was detected in several surveys that the high activity levels in the population were mostly attributable to walking. Mean walking time was about 80 min/day in men and 90 min/day in women (*figure 3*).

In 2011 the prevalence of low levels of physical activity (engaging in less than 30 minutes of moderate activity on 5 days of the week or less than 20 minutes of vigorous activity on three days of the week, or a respective equivalent) was 23% in men and 22% in women (WHO 2011). According to the data of the Russia Longitudinal Monitoring Survey (www.hse.ru/rhms), the average body mass index of the adult Russian Population has increased from 23.8 in 1994 to 24.5 in 2005 where it still remained in 2010. This could be also related to decreasing activity levels just as in populations of other European countries.

Development of guidelines

Traditionally, physical activity as a public health issue was perceived in the following two ways in Russia: sport (mostly elite, striving for high achievements) or rehabilitation of patients (for example after stroke, or other diseases). Until recently there was a gap in PA promotion, particularly regarding activities for the general population and programmes for most patients. These populations were not recognized as target groups which were also in need of recommendations or physical activity counselling.

One of the reasons for this gap is the fact that clear standard recommendations on physical activity counselling for district physicians and general practitioners did not exist in Russia. In 2010 the guidelines on physical activity for primary health care providers were developed by the National Research Centre for Preventive Medicine and published in the Russian Journal for Preventive Medicine (Potemkina 2010).

Figure 1: Standardised death rate for all causes and all ages, in the Russian Federation and in the European Union, and live births in the Russian Federation in the year 1990 to 2010. All numbers are given per 1000 population. Source: European health for all data-base (HFA-DB) of the World Health Organization Regional Office for Europe, updated: April 2014 (www.euro.who.int).

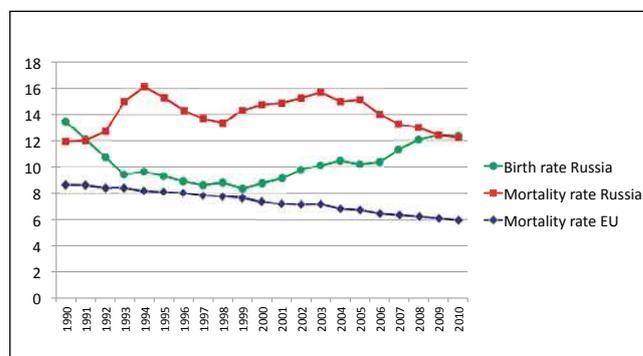


Figure 2: Prevalence of low levels of physical activity according to IPAQ data in 25–64 year olds in three Russian cities, 2000–2002 (n=3019).

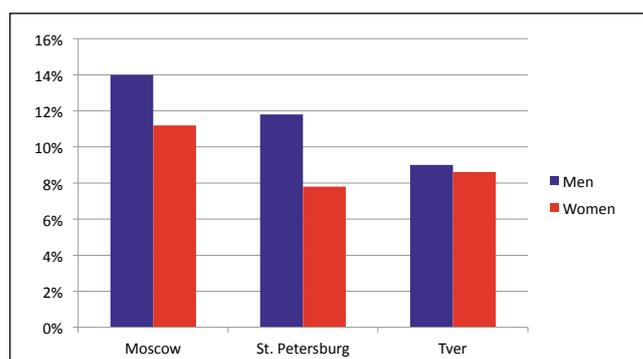
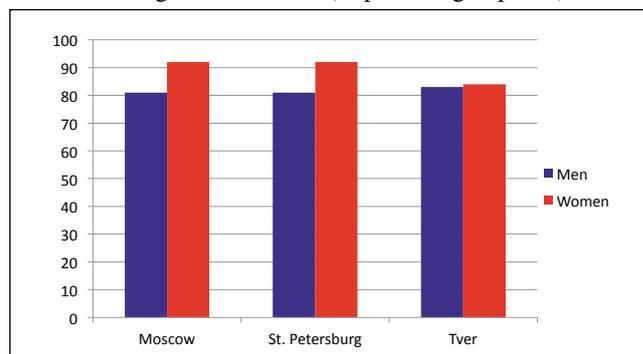


Figure 3: Age standardized daily walking time in minutes in 25–64 year olds in three Russian cities, 2002 (n=3722). Source: Russian Countywide Integrated Noncommunicable Disease Intervention Programme CINDI (<http://cindi.gnicpm.ru>).



The guidelines were based on the Global Recommendations on Physical Activity for Health (WHO 2010) and included the following elements: evaluation of the patients' activity levels and their motivation, and – depending on those factors – three types of recommendations. On the basis of these guidelines, the national physical activity recommendations on PA were



Figure 4: National Recommendations on Cardiovascular Prevention and Guidelines on Physical Activity for Primary Health Care Providers in the Russian Federation.

developed in 2011 and included in the National Recommendations on Cardiovascular Prevention of the Society of Cardiology of the Russian Federation (Cardiovascular Prevention 2011) (figure 4). In 2012, the guidelines were adopted by the Ministry of Health of the Russian Federation and recommended to primary health care providers of all Russian regions (figure 4). The National Recommendations on Cardiovascular Prevention were widely discussed among professionals and political authorities at national conferences.

Training of health care providers

The current Russian health care system was established at the beginning of the 20th century. The main principle of the system is availability and free service. Governmental health insurance (compulsory insurance) covers all residents of the country. The existing governmental health care system is based on the geographic-territorial principle. Each resident in Russia has obligatory insurance and can apply for care at the local outpatient clinic, which is typically located close to the place of residence and has a contract with the governmental insurance company. A district physician works at the outpatient clinics and provides primary health care. During the last two decades general practitioners (GPs) have started working in different regions of Russia, but until now the system of GPs is not widespread.

Since the 1990s a parallel voluntary insurance system appeared in the country, and private health structures began to develop. The system functions on an individual contract basis on health care or through the employer, typically with large commercial operations, which take care of their employees.

Until now, patient counselling in physical activity as well as in smoking cessation, healthy nutrition or other behaviours is not covered by insurance companies. This is one of the reasons why primary health care providers are not sufficiently involved in counselling their patients regarding healthy lifestyles. The absence of this topic in the pre-graduate and post graduate curricula of medical universities as well as limited counselling skills in physicians are additional barriers in this area.

In 2011, a regular educational training course based on the guidelines described above has been established by the National Research Centre for Preventive Medicine for primary health

care providers. In 2012, 372 regional primary health care physicians were trained in physical activity counselling, 225 of them in a distance education course. In 2013, the training was disseminated to 1611 physicians and 44 faculties of Medical Academies from different Russian regions. Currently a protocol for the evaluation of the effectiveness of this course is being elaborated.

Conclusions

There is strong scientific evidence on the benefits of physical activity for health. International and national recommendations are available on physical activity counselling for primary health care providers. Exercise in medicine in Russia is in the process of development. The further implementation of the physical activity recommendations depends on the one hand on their inclusion in the curricula of medical universities and on the other hand on the creation of ways for involving and motivating primary health care providers to counsel patients in this area.

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