

*prandial distress syndrome (PDS) and epigastric pain syndrome (EPS) with significant overlap with gastroesophageal reflux disease (GERD) and irritable bowel syndrome (IBS) symptoms. Current recommended therapy is antisecretory drugs (PPIs or H2RAs), but recurrence of symptoms is often after intermission of therapy. Prokinetic drugs such as metoclopramide and domperidone are especially effective in PDS, but like antisecretory drugs long term therapy is not recommended. Acotiamide could be effective as prokinetics. Antidepressants (SSRI) show some results as well as bismuth salts and simethicone but adequate trials are needed. Various numbers of Chinese, Korean and Iranian herbs are excluded from this research. Alginates provide effects in GERD, but FD effects are doubtful. Data show that SWT5 is effective as prokinetics, especially with IBS overlap. Peppermint and caraway oil, star anise, ginger and artichoke leaf extract have better efficacy than placebo in the treatment of functional dyspepsia. Olive oil, red pepper, curcuma, dandelion and Melissa could be useful, but well developed prospective clinical trials are needed.*

**Keywords:** Functional dyspepsia, herbal products, potential therapy

## JAVNO ZDRAVSTVENI ZNAČAJ FIZIČKE AKTIVNOSTI

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### **Sažetak**

Fizička neaktivnost (FN) je među najznačajnijim faktorima rizika za hronične nezarazne bolesti (HNB), koje su vodeći javnozdravstveni problemi u svetu i kod nas. Javno zdravstveni problem fizičke neaktivnosti možemo utvrditi učestalošću, posledicama po zdravlje, direktnim i indirektnim ekonomskim posledicama kao i načinom preventivnog delovanja.

Učestalost posmatrana kroz prevalenciju FN i trend ukazuje na zabrinjavajuće fakte odnosno stalni porast fizički neaktivnih osoba u svim starosnim kategorijama. Istraživanjem zdravlja stanovništva Srbije. 2013 godine ispitivana je učestalost i trajanje fizičke aktivnosti u toku rada, kretanja u toku dana i rekreacije u slobodno vreme. Rezultati ukazuju da 43,6% stanovništva Srbije obavlja posao sedeći ili stajući, svaki drugi stanovnik Srbije obavlja svakodnevno kretanje u trajanju od 30 minuta, a u slobodno vreme tek svaki deveti stanovnik Srbije provodi 90 minuta nedeljno na rekreaciji. Prema izveštaju SZO za Evropsku regiju 20% stanovništva fizički je inaktivno, još 43% je sa nedovoljnom fizičkom aktivnosti. U istom izveštaju se ističe da fizička neaktivnost spada u prvih pet vodećih rizika smrtnosti stanovništva, zajedno sa povišenim krvnim pritiskom, pušenjem duvana, povišenim šećerom u krvi i povećanom telesnom masom, odnosno gojaznošću.

Fizičku neaktivnost zajedno sa drugim bihevijoralnim faktorima rizika kao što su nepravilna ishrana, zloupotreba alkohola i pušenje duvana možemo posmatrati kao primarne faktore rizika, a oni su najčešće odgovorni za nastanak drugih (endogenih) faktora rizika kao što su hiper idislipidemije, povećana telesna masa/gojaznost, povišen krvni pritisak, dijabetes i dr.

Istraživanja o opterećenju bolestima pokazuju da su kardiovaskularne, maligne bolesti, šećerna bolest i depresija vodeće dijagnoze sa najvećim brojem izgubljenih godina kvalitetnog života (*Disability-Adjusted Life Year - DALY*) odnosno SZO je objavila da svake godine umre 1 milion ljudi zbog bolesti koje su povezane sa FN i da se svake godine izgubi 8,3 miliona DALY-a vezano za FN, što nesumnjivo dokazuje ogromne zdravstveni posledice FN.

Ekonomske posledice FN posmatraju se kao direktni i indirektni troškovi odnosno gubici. Direktni troškovi odnose se uglavnom na troškove lečenja od HNB a indirektni troškovi podrazumevaju troškove usled prerane smrti, odsustva sa posla, smanjene radne sposobnosti, preranog penzionisanja i dr.

Glavna dilema kako lekara kliničara, odnosno stručnjaka u oblast javnog zdravlja jeste kako dati opšte prihvatljive preporuke, šta je to zadovoljavajuća a šta optimalna FA u konkretnoj kliničkoj terapiji ili kao preporuka za određenu populacionu grupu, zato je SZO dala preporuke za FA u odnosu na starosne kategorije.

Zbog svega gore navedenog fizičku aktivnost treba posmatrati kao resurs za unapređenje zdravlja i prevenciju bolesti. Povećanje nivoa fizičke aktivnosti je jedna od mera koja bi imala najveći pozitivan uticaj na zdravlje populacije.

**Ključne reči:** fizička neaktivnost, kronične nezarazne bolesti, fizička aktivnost

## **PUBLIC HEALTHY SIGNIFICANCE OF PHYSICAL ACTIVITIES**

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### **Abstract**

Physical inactivity (FN) is among the most important risk factors for chronic non-infective diseases (HNB), which are leading public health problems in the world and in our country. The public health problem of physical inactivity can be determined by the frequency, health consequences, direct and indirect economic consequences as well as the possible and preventive behavior.

The frequency seen through the prevalence of FN and the trend points to the worrying facts, the steady rise of physically inactive persons in all age categories. In 2013, the frequency and duration of physical activity during work, daytime running and recreation were investigated in free time. The results indicate that 43.6% of the population of Serbia does their job in the countryside or in the stands, every other Serbian citizen performs a daily movement for 30 minutes, and in leisure time only every ninth Serbian citizen spend 90 minutes weekly on recreation. According to the WHO report for the European region, 20% of the population is physically inactive, another 43% with insufficient physical activity. The same report points out that physical inactivity falls into the top five leading mortality risks of the population, along with high blood pressure, tobacco smoking, increased blood sugar, and increased body mass, or obesity. Physical inactivity along with other behavioral risk factors such as improper diet, alcohol abuse, and smoking can be seen as primary risk factors, and they are usually responsible for the emergence of other (endogenous) risk factors such as hyper and dyslipidemia, increased body mass / obesity, elevated blood pressure, diabetes and more.

Disease-related disease studies show that cardiovascular, malignant, diabetic, and depression-leading diagnoses with the highest number of disadvantaged years of life (DALY) or WHO have reported that 1 million people die each year due to illnesses that are related with FN and losing 8.3 million DALYs each year to FN, which undoubtedly proves the enormous health consequences of FN.

The economic consequences of FN are seen as direct and indirect costs or losses. Direct costs relate mainly to the cost of handling the CNB and indirect costs imply costs due to premature death, absence from work, reduced working ability, early retirement, etc.

The main dilemma as a clinician or public health practitioner is to provide general acceptable recommendations, what is satisfactory and what is the optimal FA in specific clinical therapy or as a recommendation for a particular population group, so WHO has given recommendations to the FA compared to the elderly categories.

Because of all the physical activity mentioned above should be seen as a resource for improving health and preventing the disease. Increasing the level of physical activity is one of the measures that would have the greatest positive impact on the health of the population.

**Keywords:** Physical inactivity, chronic non-infective diseases, physical activity