

Kronične bolezni z vidika multimorbidnosti

Znanstveni članek

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KLJUČNE BESEDE: multimorbidnost, komorbidnost, kronične bolezni

POVZETEK - V Evropi se soočamo s porastom kroničnih bolezni zaradi starajoče se populacije in tveganj, ki so povezana z življenjskim slogom. Multimorbidnost je pogost problem starajočih se družb z raznovrstnimi in neugodnimi posledicami za posameznike, družbo in zdravstvene sisteme. Prevalenca s starostjo progresivno narašča in multimorbidnost postaja najpogostejše kronično stanje. Multimorbidnost pomembno vpliva na neugodne izide zdravljenja, kvaliteto življenja, hkrati pa je povezana s porastom stroškov zdravstvenih storitev. Ljudje živimo dlje, a z več kroničnimi stanji, kar povečuje potrebe po zdravstveni oskrbi. V staroživih družbah kronične bolezni predstavljajo glavni vzrok obolevnosti in tudi smrtnosti, zato obstaja potreba po stroškovno učinkovitih poteh za oskrbo populacije. Projekt skupnega ukrepanja CHRODIS (Joint Action on Chronic Diseases) je usmerjen v učinkovito zmanjšanje kroničnih bolezni in promocijo zdravega življenja ter aktivnega staranja širom Evrope. Glavni cilji so promocija zdravega načina življenja, spodbujanje in lajšanje izmenjave in prenosa dobrih izkušenj na področju kroničnih bolezni med državami EU in regijami, s posebno pozornostjo na promociji zdravja, preventivi kroničnih stanj, multimorbidnosti in sladkorne bolezni.

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KEY WORDS: multimorbidity, comorbidity, chronic diseases

ABSTRACT - Europe is faced with an increase of chronic diseases due to ageing of the population and the risks that are associated with lifestyle. Multimorbidity is a common problem of ageing societies with diverse and negative consequences for individuals, society and health systems. The prevalence progressively increases with age and multimorbidity is becoming the most common chronic condition. Multimorbidity significantly affects the unfavourable results of treatment, quality of life, and is associated with an increase in healthcare costs. People are living longer but with more chronic conditions, which has important implications for medical needs. In ageing societies chronic diseases are the main cause of morbidity and mortality, so there is a need for cost-effective ways to nurse the population. The purpose of the joint action project CHRODIS is the effective contribution in reducing the burdens of chronic diseases and to promote healthy living and active ageing across Europe. The main objectives are to promote, encourage and facilitate the exchange and transfer of good practices in the field of chronic diseases among the EU countries and regions. Good practices address chronic conditions with particular attention to the promotion of health and prevention of chronic conditions, multimorbidity and diabetes.

1 Uvod

V Evropi se soočamo s porastom kroničnih bolezni zaradi starajoče se populacije in tveganj, ki so povezana z življenjskim slogom.

Kronične bolezni predstavljajo največji delež bremena bolezni v Evropi in so odgovorne za 86 % smrti (Barnet et al., 2012; Melis et al., 2014; Marengoni et al., 2008; Tinetti et al., 2012). Zdravstveni sistemi po svetu se soočajo z izzivom, kako zagotoviti kakovostno oskrbo za paciente s kompleksnimi težavami, ki izvirajo iz sočasnega pojava več kroničnih bolezni oziroma stanj, kar imenujemo multimorbidnost. Ta postaja najpogostejše kronično stanje, katerega prevalenca s starostjo progresivno narašča. (Barnet et al., 2012; Melis et al., 2014; Marengoni et al., 2008; Tinetti et al., 2012).

Multimorbidnost je tako pri mlajših kot pri starejših odraslih osebah pomemben faktor za neugodne izide zdravljenja in je povezana tudi s porastom stroškov zdravstvenih storitev. V primerjavi z osebami, ki imajo eno bolezensko stanje, pacienti z multimorbidnostjo umirajo prej, so večkrat hospitalizirani, imajo slabšo kakovost življenja in prejemajo več zdravil (Marengoni et al., 2011; Fortin et al., 2007).

Pacienti z multimorbidnostjo imajo kompleksnejše zdravstvene (in druge, npr. socialne) potrebe, vendar so glede na tradicionalno orientiran medicinski pristop, ki temelji na zdravljenju akutno bolnega s prevladujočim enim bolezenskim stanjem, deležni fragmentirane oskrbe, kar vodi k nepopolnim, neučinkovitim, nezadostnim oziroma celo potencialno nevarnim intervencijam.

Zdravstveni sistemi temeljijo na modelu bolezni, ki temelji na predpostavkah, kot so: organ ali sistemska patologija povzroča bolezen, simptomi in opazovani znaki so posledice neke še nepoznane bolezni, zdravljenje je usmerjeno v patologijo, rezultat zdravljenja je determiniran z boleznijo samo in je enak za vse (Smith et al., 2012). Medtem ko je ta pristop še vedno primeren za veliko bolezni, vendarle ne zajame različnih vzorcev so-obstoječih bolezni. Poleg tega ta tradicionalni pristop, ki je bolezensko orientiran, ne upošteva celotnega zdravstvenega stanja pacientov z multimorbidnostjo, ker je usmerjen le na eno bolezen in zanemarja temeljne vidike zdravja, kot so krhkost, funkcionalna zmožnost, pa tudi kognitivno in čustveno stanje (Smith et al., 2012).

Zahtevnost oskrbe pacientov z multimorbidnostjo povezuje veliko število zdravstvenih strokovnjakov, zdravstvenih storitev in različnih virov. Posamezni integrirani programi oskrbe kroničnih bolezni so preneseni v prakso na manjšem vzorcu bolnikov, širše sprejetih modelov oskrbe multimorbidnosti zaenkrat še ni (Smith et al., 2012). V zadnjih dveh desetletjih se je raziskovanje na področju multimorbidnosti okrepilo, vendar je število dokazov učinkovitosti intervencij še vedno omejeno (Banerjee, 2015).

2 Terminologija in prevalenca

Multimorbidnost se nanaša na sopojav vsaj dveh telesnih ali duševnih bolezenskih stanj, ki vzajemno delujejo pri posamezniku (Mercer et al., 2009; Uijen and Van de Lisdonk, 2008; Fortin et al., 2010). Termin multimorbidnost se včasih souporablja s terminom komorbidnost (Mercer et al., 2009), pri čemer se termin komorbidnosti nanaša na sočasen obstoj bolezni, ne zajema pa celotne kompleksnosti bolezenskih stanj in bolnikovih zdravstvenih in socialnih potreb, ki so v centru termina multimorbidnosti (Yanick et al., 2007).

Kronična stanja so v zadnjih letih postala pomemben izziv zdravstvenim sistemom po vsem svetu (Navickas et al., 2015). Glede na to, da so glavni vzroki obolevnosti in smrtnosti v staroživih družbah kronične bolezni, obstaja naraščajoča potreba po stroškovno učinkovitih poteh za oskrbo populacije (Salisbury et al., 2011; Marengoni et al., 2011; Schäfer et al., 2012).

V razvitih državah ima eden od štirih odraslih vsaj dve kronični stanji (Chronic Conditions, 2004; Mercer et al., 2009; Barnett et al., 2012), pri starejših odraslih ima vsaj polovica oseb tri ali več kroničnih stanj (American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity, 2012). V svetovnem merilu ljudje živijo dlje, a z več kroničnimi stanji, kar ima pomembne posledice za globalne zdravstvene potrebe (Global Burden of Disease Study, 2015). Zaradi staranja in podaljševanja življenjske dobe populacije ter izboljšanja zdravstvene oskrbe, vedno večje število ljudi živi s kroničnimi boleznimi (Van Oostrom et al., 2014), v Evropski uniji kar 30 % populacije (Eurostat, 2014) in ta odstotek bi se naj v naslednjih desetletjih še povečeval (Busse et al., 2010). Delež multimorbidnosti pri kroničnih pacientih narašča (Boyd and Fortin, 2010; Uijen and Van de Lisdonk, 2008). Konzervativne ocene navajajo, da v EU živi 50 milijonov ljudi z multimorbidnostjo (Rijken et al., 2013). Prevalenca multimorbidnosti je še posebno visoka pri starejših od 65 let (65 %) in pri starejših od 85 let (85 %) (Marengoni et al., 2011, Vogeli et al., 2007).

V mednarodni raziskavi pri starejših od 60 let so bili glavni dejavniki bremena bolezni: kardiovaskularne bolezni, rak, kronične respiratorne bolezni, mišično-skeletne bolezni, duševne in nevrološke bolezni (Prince et al., 2015). Večina študij je ugotovila povezavo med prisotnostjo kroničnih bolezni in zmanjšano kakovostjo življenja pri starejših (Fortin et al., 2004; Gijssen et al., 2001).

Rezultati te raziskave so skladni z ugotovitvijo raziskave EIJM – European Journal of Internal Medicine (Navickas et al., 2015) na velikem reprezentativnem vzorcu v nacionalni raziskavi v Litvi, ki je pokazala, da so kardiovaskularne bolezni najpogostejše bolezensko stanje, tako pri pacientih z eno boleznijo, kot pri pacientih s komorbidnostjo. Ugotovili so tudi, da število kroničnih bolezni narašča, še posebno od 45 do 54 leta starosti. Med bolniki z multimorbidnostjo je bilo za 61 % več ponovnih sprejemov v bolnišnico v 30 dneh po odpustu kot pri bolnikih brez nje (Navickas et al., 2015). V raziskavi je pojavnost kroničnih bolezni med odraslo populacijo znašala 17,2 %. Število kroničnih bolezni je še posebno naraščalo pri moških v starosti od 45 do 54 let. Multimorbidnost je prispevala k 258,761 dodatnih ležalnih dni na leto. Obiski pri zdravniku so bili 2,1-krat večji pri multimorbidnih bolnikih, kot pri bolnikih z eno kronično boleznijo, in 9,6-krat so bili večji obiski na domu (Navickas et al., 2015).

Podobno je potrdila tudi raziskava na Nizozemskem, kjer so ugotovili, da so imeli multimorbidni pacienti več stikov z osebnim zdravnikom, več predpisanih zdravil in več sprejemov v bolnišnice. Najbolj izpostavljena skupina multimorbidnih pacientov so starejše ženske z nižjimi prihodki in iz majhnega gospodinjstva (Hopman et al., 2015).

V Vietnamu (Ha et al., 2015) navajajo, da je 40 % starejših oseb multimorbidnih. Slabša zdravstvena oskrba in nezaposlenost sta obremenilni okoliščini. Med pozitivne okoliščine prištevajo višjo izobrazbo in življenje v urbanih okoljih. Med dodatne negativne dejavnike prištevajo še nizko izobrazbo, kajenje in preveliko težo (Pache et al., 2015). V raziskavi na Tajskem (Hsu, 2015) so ugotovili najbolj ogrožajoče kronične bolezni. To so kardiovaskularne bolezni, kronične nespecifične bolezni pljuč, artritis, rak, gastroenterološke bolezni in bolezni ledvic. Raziskava v Španiji (Alonso-

Moran et al., 2015a) je potrdila, da je slabša kakovost življenja pri starejših povezana s spolom (ženske), multimorbidnostjo in samskim življenjem. Vsaka dodatna bolezen v multimorbidnosti je statistično pomembno prispevala k nižanju kakovosti življenja.

Osteoartikularna bolezen, Parkinsonova bolezen, diabetes in kardiovaskularne bolezni so kronične bolezni, ki najbolj negativno vplivajo na rezultat pacientovega zdravljenja, vključno z invalidnostjo, slabšo kvaliteto življenja in povečano porabo finančnih virov (Alonso-Moran et al., 2015a; Forjaz et al., 2015; Hopman et al., 2015). Kombinacija različnih stanj ustvarja kompleksnejše potrebe po oskrbi. Multimorbidnost ni povezana le s ponavljajočimi se (Condelius et al., 2008; Gabrovec, 2015) ali preprečljivimi (Wolff et al., 2002) bolnišničnimi sprejemi, ampak tudi s pogosto uporabo osnovnega zdravstva (Glynn et al., 2011; Van Oostrom et al., 2014; Gabrovec in Lobnikar, 2015) in pogostejšimi obiski specialistov (Laux et al., 2008), tudi za diagnostiko, ki sicer ne potrebuje specialistične obravnave (Starfield et al., 2005). Na rezultat zdravljenja in povečano uporabo virov lahko poleg posameznih bolezni vplivajo tudi kombinacije različnih bolezni. Takšen primer je npr. diabetes v povezavi z ostalimi kroničnimi boleznimi. Diabetes je pogosto povezan s kardiovaskularnimi in boleznimi ledvic, kar je tudi pričakovano, ker imajo te bolezni enak patofiziološki vzorec (Alonso-Moran et al., 2015b).

Obstajajo razlike med pacienti z diabetesom tipa 2, kjer je prevalenca multimorbidnosti večja, in pacienti z drugimi kroničnimi boleznimi (Alonso-Moran et al., 2015b). Pri pacientih z diabetesom tipa 2 soobstoj duševne komorbidnosti pomembno poveča tveganje za hospitalizacijo (Calderon-Laranga et al., 2015).

Potrebno je razviti pristope za nekatere sočasne bolezni, ki mogoče niso tako pogoste, a lahko vodijo k negativnim rezultatom zdravljenja in povečani rabi virov (Onder et al., 2011). Hkrati pa področje merjenja multimorbidnosti še ni dovolj raziskano, zato bo temu treba v prihodnosti nameniti več pozornosti (Le Reste et al., 2015).

Kompleksnost oskrbe pacientov z multimorbidnostjo potrebuje vpletenost večjega števila ponudnikov zdravstvene oskrbe in resursov. Medtem ko najdemo primere integriranih programov oskrbe kroničnih bolezni v relativno majhnih populacijah, ne najdemo širše sprejetih modelov oskrbe multimorbidnosti (Smith et al., 2012).

V zadnjih dveh desetletjih se je raziskovanje na področju multimorbidnosti povečalo, a je število dokazov o učinkovitosti intervencij za izboljšanje oskrbe pacientov še vedno omejeno (Banerjee, 2015).

3 Fizična zmogljivost, duševno zdravje in socialno-ekonomski status

Invalidnost, odvisnost od pomoči druge osebe oziroma slabo fizično stanje so pogoste značilnosti multimorbidnosti. Prisotnost in tudi interakcije med več boleznimi povzročajo invalidnost in slabo fizično stanje (Tinetti et al., 2012; Marengoni et al., 2011; Landi et al., 2010). Različni vzorci multimorbidnosti so jasno povezani s funkcionalnimi sposobnostmi in upadanjem fizične zmogljivosti (Jackson et al., 2015).

V povezavi z multimorbidnostjo slabo fizično stanje resno ogroža samostojnost in kakovost življenja starejših ter ima pomemben socialno-ekonomski vpliv (Marengoni et al., 2009). Pacienti z multimorbidnostjo v družinski medicini predstavljajo bolj pravilo kot izjemo (Fortin et al., 2005). Intervencije za ljudi z multimorbidnostjo in slabim fizičnim stanjem predstavljajo preventivo bodočim komplikacijam pri visoko rizični populaciji (Onder et al., 2011).

Težave v duševnem zdravju vključujejo široko zbirko stanj, od depresije do kognitivnega upada. V zadnjih letih so ta stanja dobila več pozornosti zaradi visoke prevalence in uničujočih posledic za paciente, svojce in družbo (Calderon-Laranga et al., 2015). Duševna stanja, in še posebno kognitivni upad, so pogosto povezana s kroničnimi boleznimi, kot so hipertenzija, kardiovaskularne bolezni, diabetes in osteoporoza. Prisotnost kognitivnega upada in povezava z multimorbidnostjo ima dodaten učinek na negativne zdravstvene izide in povečane stroške oskrbe (Calderon-Laranga et al., 2015).

Socialno-ekonomski status je pomemben vir zdravstvene neenakosti, saj obstaja povezava med socialno-ekonomskim statusom in zdravjem ljudi. Socialno ekonomski indikatorji so tesno povezani s prevalenco kroničnih bolezni in izdatki za zdravstvene storitve pacientov z multimorbidnostjo (Barnett et al., 2012). Ta je povezana z nižjim dohodkom oseb in manjšim gospodinjstvom, obenem pa s povečano uporabo zdravstvenega sistema (Hopman et al., 2015).

Ugotovitve potrjujejo rezultate prejšnjih raziskav, da je prevalenca multimorbidnosti, in s tem povezana potreba po oskrbi, večja med ljudmi, ki so prikrajšani za zdravstveno oskrbo. Ljudje, ki so revnejši in imajo nižjo izobrazbo, bodo v manjkrat uživali prednosti izboljšav na področju javnega zdravja (House et al., 2005; Orueta et al., 2014).

4 Pomen kompleksnega celostnega pristopa

Poleg zgoraj omenjenih faktorjev so pomembni tudi drugi vzroki. Kot determinante pri multimorbidnosti so pomembni še: spol, fizična aktivnost, teža, prehrana in polifarmacija (Alonso-Moran et al., 2015a; Wikstrom et al., 2015; Corrao et al., 2014).

Za zagotavljanje uspešnosti in stroškovne učinkovitosti morajo biti raziskave o intervencijah usmerjene tudi v paciente z visokim tveganjem in posebnimi karakteristikami in ne zgolj v splošno populacijo multimorbidnih pacientov (Onder et al., 2011).

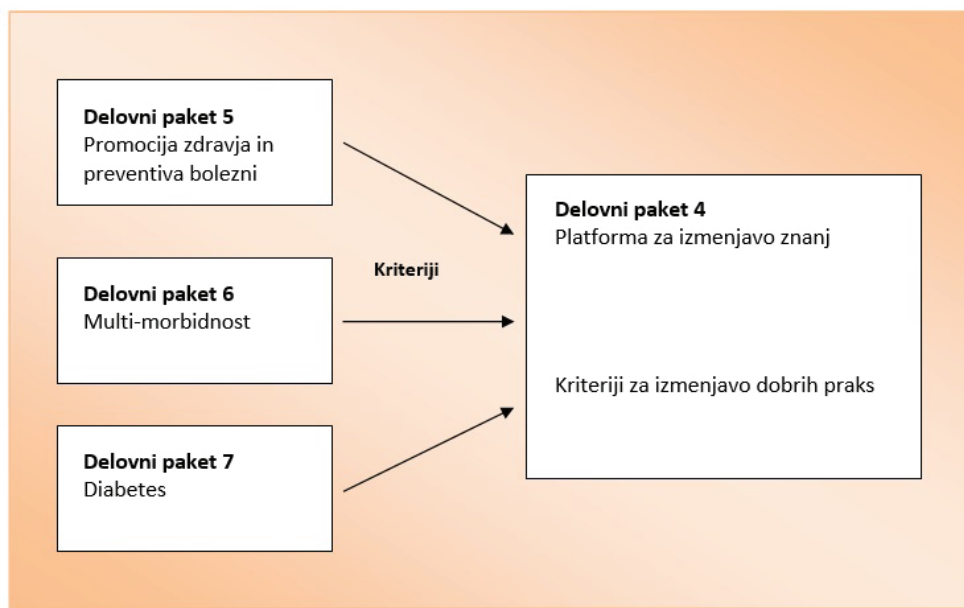
5 Skupno ukrepanje pri kroničnih boleznih

»Joint Action on Chronic Diseases and Healthy Ageing across the Life Cycle« je evropski projekt skupnega ukrepanja, ki se je pričel v januarju 2014 in bo trajal 39 mesecev.

Projekt skupnega ukrepanja Chrodis bo učinkovito zmanjšal breme kroničnih bolezni in spodbudil promocijo zdravega življenja in aktivnega staranja širom Evrope. Glavni cilj je promocija zdravja ter lajšanje izmenjave in prenosa dobrih izkušenj na tem področju med državami EU in regijami. Najpomembnejša je promocija zdravja in primarna preventiva kroničnih stanj in bolezni.

To dvoje postavlja v središče vedenjske dejavnike tveganja, socialne determinante in neenakopravnost v zdravstvu. Obravnava multimorbidnosti v središče postavlja multidisciplinarnost in integrirano oskrbo, varnost pacientov in izobraževanje zaposlenih. Identifikacija značilnosti multimorbidnih pacientov, ki je povezana z visoko stopnjo porabe virov in negativnimi rezultati zdravstvene oskrbe, je potrebna za identifikacijo ciljne populacije, ki jim intervencije lahko koristijo. Pri preučevanju diabetesa smo v središče postavili multidisciplinarno oskrbo, ki zajema celoten spekter, od primarne preventive do zdravljenja. Platforma za izmenjavo znanja (slika 1) in spletna klirinška hiša bodo nudile odločevalcem, oskrbovalcem, pacientom in raziskovalcem najbolj pomembne informacije o najboljših praksah (slika 2) in kroničnih boleznih z osredotočenostjo na kardiovaskularne bolezni in diabetes.

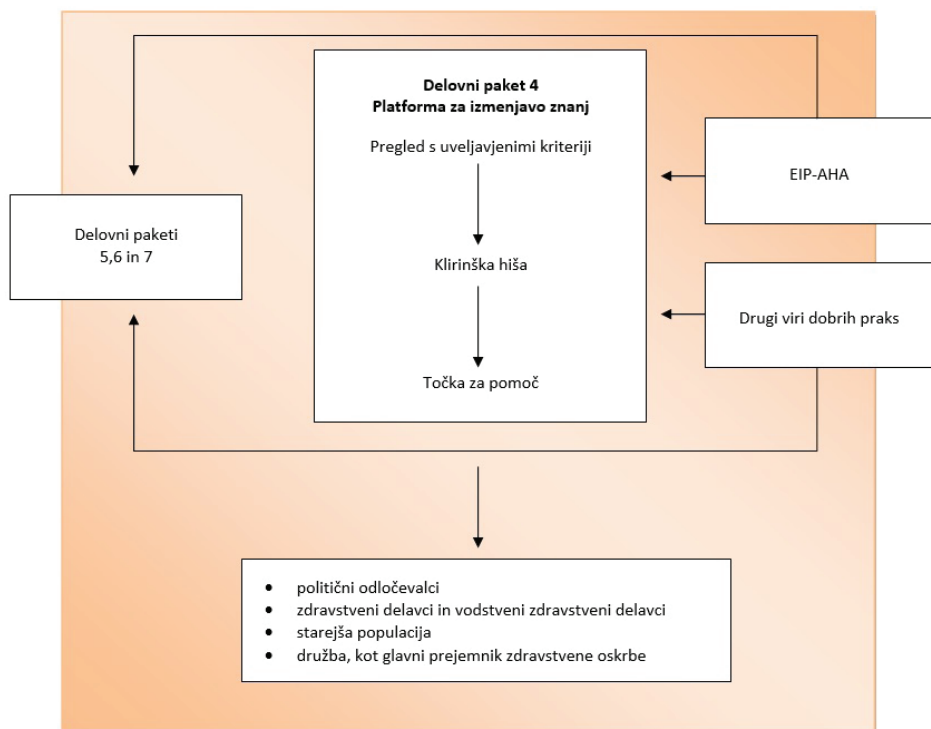
Slika 1: Pretočnost tokov proti platformi za izmenjavo znanja



Vir: Povzeto po: JA-CHRODIS at a glance, 2015.

Glede na cilj bo izmenjava in prenos dobrih izkušenj rezultat izboljšanih rezultatov politik, programov in kliničnih intervencij za javno zdravje na področju kroničnih stanj. Projekt skupnega ukrepanja »Joint action CHRODIS« vodi k priporočilom, ki bodo temeljila na najboljših razpoložljivih dokazih učinkovite preventive, upravljanja in zdravljenja kroničnih bolezni od pojava le-teh dalje.

Slika 2: Organizacija tokov dobrih izkušenj



Vir: Povzeto po: JA-CHRODIS at a glance, 2015.

6 Zaključek

Zdravstveni sistemi se po vsem svetu soočajo s staranjem prebivalstva, kar prinaša izzive, s katerimi se do sedaj še niso soočili. Podaljševanje življenjske dobe spremlja povečevanje števila bolnikov z multimorbidnostjo. Prevalenca multimorbidnosti je visoka in s starostjo progresivno narašča, kar močno vpliva na kakovost življenja prebivalstva in vzdržnost zdravstvenih sistemov. Obravnava multimorbidnosti potrebuje nadgradnjo tradicionalno orientiranega medicinskega pristopa s celovitim pristopom, ki vključuje veliko število zdravstvenih strokovnjakov, zdravstvenih storitev in različnih virov ter povezovanje s socialnim varstvom.

Branko Gabrovec, PhD, Jelka Zaletel, PhD

Chronic Diseases through the Lens of Multimorbidity

Multimorbidity is a common problem of ageing societies with diverse and negative consequences for individuals, society and health systems. The prevalence progressively increases with age and multimorbidity is becoming the most common chronic condition. In Europe, chronic diseases such as diabetes affect 8 out of 10 people over 65 years of age. Research shows that in developed countries 25% of adults have at least two chronic conditions and more than half of people older than 65 even three or more chronic conditions. EU countries spend from 70–80% of health budget for the treatment of chronic diseases. Many chronic diseases are preventable, or their onset can be delayed, through policies and interventions that address modifiable individual and social risk factors. Yet only 3% of health costs in the EU Member States are presently invested in prevention measures, whereas about 97% are spent on treatment.

Multimorbidity significantly affects the unfavourable results of treatment, quality of life, and is associated with an increase in health care costs. People are living longer but with more chronic conditions, which has important implications for medical needs. In ageing societies chronic diseases are the main cause of morbidity and mortality, so there is a need for cost-effective ways to nurse the population.

Multimorbidity refers to joint occurrence of at least two physical or mental disease states, which interact in an individual. The term multimorbidity is sometimes used interchangeably with the term comorbidity, wherein the term comorbidity refers to the coexistence of the diseases, but does not cover the entire complexity of the disease conditions and the patient's health and social needs that are in the centre of the term multimorbidity.

In developed countries, one out of four adults have at least two chronic conditions, in older adults at least a half of persons have three or more chronic conditions. On a global scale, people are living longer but with more chronic conditions, which has important implications for global health needs. Due to ageing and extending of life expectancy of the population and improving of health care, the increasing number of people live with chronic diseases. Multimorbidity prevalence is particularly high among people older than 65 years (65%) and older than 85 years (85%).

The findings of various researches highlight the need to develop approaches to some approaches of concurrent diseases that may not be so common, but can lead to a negative result of treatment and increased use of resources. At the same time, the measurement of multimorbidity is not yet sufficiently researched, so it will be necessary to devote more attention to this in the future. The complexity of care for patients with multimorbidity requires the involvement of a large number of care providers and resources. In the last two decades, research in the field of multimorbidity increased, but the number of evidences of the effectiveness of the interventions for improvement of patient care is still limited.

Patients with multimorbidity have complex medical needs, but given the traditionally oriented medical approach, which is based on the treatment of acutely ill with a dominant one disease state, they receive a fragmented care. Their care is more demanding and connects a large number of health professionals, health services and different sources. Health systems are based on a disease model, which is based on assumptions such as: the organ or systemic pathology causes disease, the symptoms and observed signs are the consequences of some still unknown disease, the treatment is focused on pathology, and the outcome of the treatment is determined by the disease itself and is equal for all. While this approach is still appropriate for many diseases, however, it does not cover the different patterns of co-existing diseases. Moreover, this traditional approach, which is disease-oriented, does not take into account the overall health status of patients with multimorbidity because it focuses on only one disease and neglects the fundamental aspects of health, such as fragility, functional ability, as well as cognitive and affective state.

Disability, dependence on the assistance of another person, or poor physical condition are frequent features of multimorbidity. Different patterns of multimorbidity are clearly connected with functional abilities and the decline of physical capabilities. In connection with multimorbidity, poor physical condition seriously threatens the independence and life quality of older people and has an important socio-economic impact. Mental states, especially cognitive decline, are often associated with chronic diseases such as hypertension, cardiovascular disease, diabetes and osteoporosis. The presence of cognitive decline and connection with multimorbidity has an additional negative impact on health outcomes and increased costs of care. The socio-economic status is also important, since there is a connection between socio-economic status and health of the people. Socio-economic indicators are closely related to the prevalence of chronic diseases and expenses for health services of patients with multimorbidity. The findings confirm the results of previous researches that say that the prevalence of multimorbidity and the related need for care is greater among people who are disadvantaged. People who are poorer and have less education will to a lesser extent enjoy the benefits of improvements in public health.

In addition to the above mentioned factors, other reasons are also important. As determinants of health outcomes and resource users in multimorbidity the following is also relevant: gender, physical activity, weight, diet and polypharmacy.

The European Commission is co-funding a large collaborative project named Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS) in the context of the EU Second Programme of Community Action in the Field of Health 2008-2013. "Joint Action on Chronic Diseases and Healthy Ageing across the Life Cycle" is the common European project, which began in January 2014 and will last 39 months. The purpose of the joint action CHRODIS is the effective contribution in reducing the burdens of chronic diseases and to promote healthy living and active ageing across Europe. The main objectives are to promote, encourage and facilitate the exchange and transfer of good practices in the field of chronic diseases among the EU countries and regions. Good practices addresses

chronic conditions, with particular attention to the promotion of health and prevention of chronic conditions, multimorbidity and diabetes. Health and prophylaxis promotion puts in the focus the behavioural risk factors, social determinants and inequalities in health. Through the Governing Board, Member States are to be involved in developing a plan of sustainability. This will help keeping chronic diseases at the forefront of the political agenda for health after the Joint Action ends. Gathering good practices in Platform for Knowledge Exchange (PKE) will doubtless contribute to the plan of sustainability of the process of exchange and transfer of good practices. Life expectancy in the EU is higher than ever before, due in part to good and improving healthcare. However, the co-occurrence of multiple chronic conditions in one person, i.e. multimorbidity, has become increasingly common as well. 65% of people over 65 are affected by multimorbidity. This number rises to 85% for the 85-year-old group. Complex healthcare needs of multimorbid patients require the involvement of a large number of healthcare providers and a vast amount of resources. Often patient care is fragmented, expensive and fails to respond to the needs of the patient. While there are examples of comprehensive care programs being implemented in relatively small populations, there are no widely accepted care models available across the EU Member States, due to organisational differences.

The aim of the JA-CHRODIS with work on multimorbidity is to review the existing patient-centred comprehensive care programs in order to identify the needs of the participating countries' healthcare systems. The aim is also to advise on the best possible care models for multimorbid patients, taking into account outcomes, cost-effectiveness, applicability and replicability.

The EU reflection process on chronic diseases (September 2013) identified the potential that lies in systematically mapping, validating and transferring good practices that exist across the EU in relation to health promotion and primary prevention of chronic disease. The aim of the JA-CHRODIS is also to develop this potential. The focus will be on cardiovascular diseases, stroke and type 2 diabetes. The work will take into account lifestyles and health-related behaviour as well as the socio-economic determinants that influence them.

Work on multimorbidity puts in the focus multidisciplinary and integrated care, patient safety and employee training. The identification of characteristics of multimorbid patients, which is associated with a high level use of resources and the negative results of health care, is required for the identification of the target population for which intervention may be useful. Regarding the objective, the exchange and transfer of good practices will be the outcome of the improved results of policies, programs and clinical interventions for public health in the area of chronic conditions. The project "Joint action CHRODIS" leads to the recommendations, which will be based on the best available evidence of effective prevention, management and treatment of chronic diseases in the course of life.

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