Receptivna muzikoterapija kao dodatna intervencija u programu rehabilitacije kardiovaskularnih bolesnika

Receptive Music therapy as an Additional Intervention in the Rehabilitation Program of Cardiovascular Patients

Uvod

Brzim i naglim razvojem tehnologije stvoreno je obilje materijalnih dobara, što je, s jedne strane, dovelo do napretka, a, s druge, do povećanja stresa, anksioznosti i nezadovoljstva. Osobe koji pate od nagomilanoga stresa lakše podliježu bolestima, napose psihosomatskim i kardio-

SAŽETAK: Brzim i naglim razvojem tehnologije i užurbanim načinom života došlo je do povećanja stresa, anksioznosti i nezadovoljstva. Procesi vezani za psihički stres pridonose multifaktorskom riziku od pojave i razvoja različitih bolesti. Visoka učestalost akutnih bolesti srca nameće potrebu stvaranja učinkovite i ekonomične strategije prevencije i rehabilitacije. Muzikoterapija, kao mlada disciplina, može se smatrati interdisciplinarom i transdisciplinarom jer sadržava elemente iz nekoliko područja i disciplina povezanih na nove načine te profesionalno koristi glazbu i njezine elemente u svrhu postizanja terapijskih ciljeva. Receptivna muzikoterapija, kao komplementarna terapija, služi za opuštanje i upravljanje stresom i nema nuspojava. Sustavan pregled radova o učinku glazbe na stres i anksioznost pokazuje da slušanje glazbe može najefikasnije djelovati na stupanj anksioznosti u ljudi ako im se ponudi odabir glazbenog sadržaja prema njihovim sklonostima. Daljnja istraživanja trebaju ispitati način percepce glazbe s obzirom na glazbene preferencije bolesnika u sklopu programa kardiovaskularne rehabilitacije. Da bi se to ustanovilo, potrebno je osmisliti instrumente za procjenu i prikupljanje podataka o glazbenoj preferenciji i percepce glazbe, kao i uključiti educiranog muzikoterapeuta u tim koji provodi kardiovaskularnu rehabilitaciju.

SUMMARY: The rapid development of technology and hectic lifestyles have led to an increase in stress, anxiety, and dissatisfaction. Processes related to psychological stress contribute to the multifactorial risk for the occurrence and development of various diseases. The high incidence of acute heart disease imposes the need to create efficient and cost-effective prevention and rehabilitation strategies. As a young discipline, music therapy can be considered interdisciplinary and transdisciplinary because it contains elements from several professional fields and disciplines connected in new ways and represents the professional use of music and musical elements to achieve therapeutic goals. As a complementary therapy, receptive music therapy serves to relax and manage stress and has no side-effects. A meta-analysis on the effects of music on stress and anxiety shows that listening to music can most effectively reduce the degree of anxiety in people if they are offered to make a choice of music content according to their preferences. Further studies should examine the way music is perceived with regard to patient musical preferences within a cardiovascular rehabilitation program. To establish this, it is necessary to design instruments for assessing and collecting data on music preference and perception of music, as well as to include a certified music therapist in the cardiovascular rehabilitation team.

KLJUČNE RIJEČI: receptivna muzikoterapija, glazba, komplementarna terapija, kardiovaskularna rehabilitacija.

KEYWORDS: receptive music therapy, music, complementary therapy, cardiovascular rehabilitation.

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Introduction

The rapid development of technology has led to the creation of an abundance of material goods, which on the one hand has led to progress and on the other hand to increased stress, anxiety, and dissatisfaction. People who suffer from accumulated stress are more susceptible to diseases,
Receptivna muzikoterapija

Među raznim vrstama terapija u kategoriji komplementarnih terapija čini se da je muzikoterapija jedna od najpopularnijih i najprihvatljivijih intervencija. Razlog je u tome što je lako dostupna, mogu je razumjeti i prihvatiti zdrave osobe kao i bolesnici. Muzikoterapija, kao mlada disciplina, mogla bi se smatrati interdisciplinarnom, čak i transdisciplinarnom jer sadržava elemente iz nekoliko područja i disciplina povezanih na nove načine. Prema definiciji Americanskog udruženja za muzikoterapiju, muzikoterapija kao komplementarna terapija profesionalno koristi glazbu i njezine elemente tijekom intervencije u medicinskom, obrazovnom i svakodnevnom okruženju, u radu s pojedincima, grupama, obiteljima ili zajednicama koje nastoje ostvariti optimalnu kvalitetu života i poboljšati kvalitet troškovno povezanih sa njihovim liječenjem, postavili su pred profesionalce za razvijanje i ponašanje bolesnica.

Vaskularnim. Zbog potpune međusobne ovisnosti tjelesnih, emocionalnih i duševnih procesa stres djeluje na svaku fazu čovjekova života. Procesi vezani za psihički stres pridonose multifaktorskom riziku od pojave i razvoja bolesti. Visoka učestalost akutnih bolesti srca u cijelom svijetu, kao i viso

bolesnici

novonastalih životnih uvjeta u smanjenju stresa i anksioznosti, kao i u lakšem prihvaćanju

jama korisnika, pomno bira glazbu za opuštanje koja pomaže

rapije, u kojemu se zajedno s klijentom stvara muzika, ili pak

ni s obzirom na kulturološko, socijalno i političko okruženje.

- zdravlje

jednicama koje nastoje ostvariti optimalnu kvalitetu života i

okruženju, u radu s pojedincima, skupinama, obiteljima ili za

intervencije u medicinskom, obrazovnom i svakodnevnom

rapija profesionalno koristi glazbu i njezine elemente tijekom

4,5

(KV) bolesnika, uključujući i iznenadnu srčanu smrt. Stoga je

povišenim arterijskim tlakom, simptomima anksioznosti i

se povećanom frekvencijom srca, respiratornim teškoćama,

strira tjeskoba. Taj stres stimulira simpatički sustav, a očituje

kih učinaka, kao i povezivanje estetskog užitka i osjećaja

emocionalno ponašanje čovjeka ističe se važnost otkrivanja

- kih učinaka, kao i povezivanje estetskog užitka i osjećaja

emocionalno ponašanje čovjeka ističe se važnost otkrivanja



Receptive music therapy

Among the various types of therapies in the category of com-

plementary therapies, music therapy seems to be one of the most

popular and acceptable interventions. The reason for this is

that it is easily accessible and that it can be understood

and accepted by healthy people as well as patients. As a young

discipline, music therapy could be considered an interdisci-

iplinary or even a transdisciplinary professional field, because it

contains elements from several fields and disciplines connect-

ed in new ways. According to the definition of the American

Association for Music Therapy, music therapy as a complemen-

tary therapy is the professional use of music and its elements as

an intervention in the medical, educational, and everyday

environment, working with individuals, groups, families, or

communities seeking to achieve optimal quality of life and

improve physical, social, emotional, cognitive, and spiritual

health. Research, education, and clinical practice in music

therapy are based on professional standards set with regard to

the cultural, social, and political environment. Music therapy

can be performed as an active form of music therapy, in which

music is created together with the client, or as receptive music

therapy, in which, depending on the client’s preferences, relax-

ation music is carefully chosen to help reduce stress and anxi-

ey and facilitate acceptance of new living conditions.

Contemporary research on the effects of music on psycho-

emotional behavior emphasizes the importance of discovering

the interconnections between compositions and stimulated

physiological effects, as well as the connection between aes-


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U bolesnika koji imaju koronarne bolesti srca često se regi-

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Anxiety is often observed in patients with coronary heart
disease. This stress stimulates the sympathetic system, which
manifests as increased heart rate, respiratory difficulties, high
blood pressure, and anxiety symptoms. These adverse effects
pose a higher risk for cardiovascular (CV) patients, including
sudden cardiac death. It is, therefore, crucial to provide and or-
ganize stress management programs for patients with CV dis-
eses. The interdisciplinary and transdisciplinary approach
by health professionals who work as a team in specialized
hospitals or outpatient centers conducts CV rehabilitation as
a part of secondary prevention. A holistic approach is the foun-
dation of CV rehabilitation, which includes individual risk as-

essment, recommended physical activity, control of CV risk
factors, therapeutic education and counseling, interventions
focused on the mental functioning and behavior of patients,
and assessment of work ability. Music therapy, as a planned
intervention that is an integral part of the CV rehabilitation
program, can help reduce anxiety and improve mood. In the
future, care should be taken to include and cooperate with ex-
perts in addition to cardiology and to establish cooperation
with citizen associations and other stakeholders whose ac-

tivities are complementary to the goals of the Working Group
for Prevention and Rehabilitation of CV Diseases.
ugode. Glazba se može slušati za rekreaciju kao pozadinska muzika kako bi se korisnici povezali sa zajednicom, tj. sa svojom skupinom. Može se slušati i radi pružanja stimulacije ili pak za umirujući ili opuštajući učinak. Bruscia navodi da su ti razlozi ujedno i potencijalni klinički ciljevi koji se, s obzirom na vrstu receptivnih muzičkih iskustava, mogu postaviti klijentu. Važno je uzeti u obzir funkciju, vrstu i glasnoću na kojoj bi se glazba trebala slušati da pobudi najbolje odgovore i privuče pozornost i interes. Snimljena muzika koja se uporablja za receptivnu muzikoterapijsku iskustva, ima posebnu vrijednost i može se primjenjivati u okviru muzikoterapije za opuštanje, za pozornost i postizanje svjesnosti svakoga pojedinog klijenta ili skupine klijenata. Snimljeni repertoar može se uključiti u terapijske seanse za širok spektar klijenata u grupnim i individualnim sesijama. Različiti stilovi i žanrovi glazbe u rasponu od rane klasične do dvadesetog stoljeća, na radne tradicionalne glazbe do popularne, od opere do mjuzikala pružaju bogat izvor iskustava u terapijskom radu. Receptivna muzikoterapija obuhvaća tehnike u kojima korisnik sluša prilikom terapijske intervencije. Redovit miljevi, koji su učinkoviti. Sustavni pregled radova o učinotvornosti glazbe sustavno i svrhu postizanja terapijskog cilja: obnavljanja, održavanja i/ili poboljšanja bolesnikova mentalnog i tjelesnog zdravlja. Pratni tim može voditi muzikoterapijsku intervenciju u kojoj je potaknuti proces unutar samog tijela za borbu protiv bolesti.

Pregled istraživanja muzikoterapijskih intervencija u kardioligiji

Suvremena medicina zdravlje definira kao stanje čovjekova potpunog tjelesnog, mentalnog i socijalnog blagostanja. Holistički pristup objašnjava zdravlje kao ravnovesu čovjekova tjelesnog, mentalnog, emotivnog i duhovnog stanja, a svrha je potaknuti procese unutar samog tijela za borbu protiv bolesti.

A review of research on music therapy interventions in cardiology

Contemporary medicine defines health as a state of complete physical, mental, and social well-being of a person. This holistic approach explains health as a balance of a person's physical, mental, emotional, and spiritual state, and the goal is to stimulate processes within the body to fight disease.
The shift from the functioning and mode of chronic stress to the mode of relaxed alertness can affect several reactions in the body such as increased production of cells to activate the defense system and hormonal and psychological changes. Therapies aimed at a relaxed state share the same features, the most important being muscle relaxation, lowering blood pressure, and regulating breathing. According to Nilsson, and as stated by Katušić et al., receptive music therapy should certainly be one of the components of the CV rehabilitation program, as an intervention that can help patients to relax by raising awareness of the music they listen to. Receptive music therapy is associated with improvement in the psychological state of patients, decreased psychophysiological and vascular reactivity, and a smaller increase of beta-endorphins under emotional stress.

The possible effects of receptive music therapy in rehabilitation are related to stress reduction and achievement of general well-being. The application of music therapy during rehabilitation in CV patients is primarily aimed at improving mood as well as alleviating and reducing fear and anxiety.

The benefit of using receptive music therapy as a form of complementary therapy in the process of rehabilitation of CV patients has been described in several papers. Mandel et al., in studies conducted by Murrock, 2002, and Emery, Hsiao, Hill, and Frid, 2003, describes the effect of a good combination of listening to music and a physiotherapy exercise program on improving cognitive performance and improved mood in patients involved in a CV rehabilitation program, and in 2009 Okada et al. described that the relaxing effect of music is associated with increased plasma release of oxytocin and decreased plasma levels of cytokines and catecholamines. In 2013, Bradt et al. reported that listening to music can also have a beneficial effect on people with CV diseases because listening to music reduces anxiety, systolic and diastolic pressure, and frequency of myocardial infarction after hospitalization.

In 2016, Clark et al. reported on the characteristics of musical preference and music perception during a physiotherapy exercise program. The study was conducted on 27 elderly adults. The aim was to discover the basic, common characteristics of selected music using the Structural Model of Music Analysis and to analyze the subjective experience of music. The predominant characteristics of the music selected by the participants included a duple meter (two beats per measure), consistent rhythm, major scale, rounded melodic lines, legato articulation, predictable harmonies, variable volume, and episodes of tension with a delayed solution. There was no prevailing tempo, and the selection of music pieces ranged from slow to medium-fast and fast. Four topics emerged from the thematic analysis of the interviews with the participants: psycho-emotional responses, physical responses, influence on behavior during exercises, and negative experience. The findings were consistent with theory and research explaining the effects of listening to music on physiological arousal and subjective experiences during exercise. Additionally, a holistic approach to music selection in elderly adults with heart disease that takes into account general well-being and adjustment issues, rather than simply performing exercises, can improve long-term lifestyle changes and align with guidelines for physical activity.

Unlike Clark, who examined the characteristics of musical preference and perception of music during a physiotherapy exercise program, Van Dyck et al. were interested in the influ-
elementa glazbe, na broj otkucaja srca pa je 2017. izvijestio o rezultatima ispitivanja. U 32 ispitanika koja su sudjelovala u istraživanju izmjerio je puls u stanju mirovanja, a zatim im je puštena ambijentalna, instrumentalna glazba čiji je tempo bio podudaran s brzinom otkucaja njihova srca. Nakon što su ispitanici nekoliko puta slušali istu glazbu čiji je tempo bio brži ili sporiji u odnosu prema prvom slušanju, nije ustanovljen utjecaj promjene tempa (ni pri ubrzanju ni pri usporenju) na promjenu brzine otkucaja srca. Testovi su pokazali znatno povećanje brzine otkucaja srca za vrijeme slušanja glazbe u usporedbi s tišinom. Može se zaključiti da se pri pasivnom slušanju glazbe pojavljuje uzbuđenje koje se odražava na broj otkucaja srca. Ti su rezultati važan doprinos našim uporabim glazbe u svakodnevnim aktivnostima.

Ivanuša i sur. izvještavaju da su u razdoblju od lipnja 2017. do listopada 2018. u Poliklinici za prevenciju kardiovaskularnih bolesti i rehabilitaciju u Zagrebu u ambulantnoj kardiovascularnoj rehabilitaciji primijenili receptivnu muzikoterapiju u 17 bolesnika. Rezultati samoprocjene zdravstvenoga stanja na Bolničkoj ljestvici za anksioznost i depresiju (Hospital Anxiety and Depression Scale, HADS) nakon završetka programa pokazuju da je i liječenje postupkom receptivne muzikoterapije u bolesnika uključenih u program dodatno pridonio smanjenju anksioznosti i depresivnosti.

Godinu dana poslije, dakle, 2019. godine, Bando i sur. opisuju učinke muzikoterapije kao komplementarne terapije u okviru Odjela integrativne medicine u Shikoku u Japanu. Oni izvještavaju o dobrotbi muzikoterapije pri fizioterapijskom programu vježbanja. Muzika ima dvostruki učinak: stimulira opuštenost i smanjuje napetost, što izravno utječe na aktivnost cveće, kao i u lakšem prihvaćanju novonastalih životnih uvjeta, što pomaže bolesniku u smanjenju stresa i anksioznosti.

Receptivnu muzikoterapiju kao komplementarnu terapiju u CV rehabilitaciji trebalo bi biti i profesionalno selektivnu glazbu za povraćaj bolesnika, u svrhu postizanja dobrobiti i blagostanja čovjeka i cijele društvene zajednice. Kao dio multidisciplinarnog tima u programu kardiovaskularne rehabilitacije trebao bi biti i muzikoterapeut koji pomno i stručno bira glazbu za povraćaj bolesnika.

**Zaključak**

Suvremeni je pristup zdravlju multidisciplinarni i transdisciplinarni, a posebno je osnovan na pružanju stručnog rješenja vezanih uz zdravstvena područja s usmjerenim na poboljšanje životnih uvjeta u svrhu poboljšanja i smanjenja stresa, anksioznosti, depresivnosti i ostalih stvaralnih uvjeta. U medicinskoj terapiji je ključno važno učinkovito i stručno određivanje glazbe i saglasanje s osobnim preferencijama. Muzika ima dvostruki učinak, uključujući i emocionalni i fizički faktori. Muzika je moćno sredство za poboljšanje stanja pacijenta, smanjenje anksioznosti i depresivnosti u vrijeme vježbanja.

**Conclusion**

The contemporary approach to health is multidisciplinary and transdisciplinary, and it is implemented by trained professionals from various fields to achieve the well-being of the individual and the entire community. A music therapist should be a team member of a multidisciplinary team in the CV rehabilitation program, with the role of carefully and professionally selecting music for relaxation that helps the patient in reducing stress and anxiety as well as acceptance of new living conditions, monitoring the patient’s recovery, and recording changes. The regulated emotional state that manifests in the activity of the autonomic nervous system affects the overall recovery during rehabilitation and creates a better self-image in CV patients. Receptive music therapy as a planned intervention with precisely set rehabilitation goals can shorten the recovery period and permanently influence the improvement of patient moods. As part of the CV rehabilitation program, it is necessary to conduct further research with a larger number of CV patients to investigate the optimal frequency of music therapy treatment and its duration, and to develop and determine scales for personal musical preference and personal perception of glazbe.
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