

Probir anksioznosti i depresivnosti ljestvicom hospitalne anksioznosti i depresivnosti na ambulantnoj kardiovaskularnoj rehabilitaciji

Screening for anxiety and depression using a hospital anxiety and depression scale in outpatient cardiovascular rehabilitation

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Uvod: Kardiovaskularne (KV) bolesti i psihijatrijski poremećaji česti su problemi, ne samo o općoj populaciji, već i u pacijenata uključenih u programe KV rehabilitacije. Međudjelovanje anksioznosti i/ili depresivnosti na KV bolest ne samo da predstavlja barijeru provođenju, nego i značajno utječe na ishode programa.^{1,2} Stoga pravodobno dijagnosticiranje kardioloških i psihijatrijskih simptoma kod pacijenta na KV rehabilitaciji omogućuje adekvatno liječenje čime se poboljšava kvaliteta života i ishod KV bolesti. Cilj je ovog rada prikazati kako ranim probirom, strukturiranom ljestvicom HAD (*Hospital Anxiety and Depression Scale*)³ koja ocjenjuje anksioznost i depresivnost, možemo utvrditi oporavak nakon programa ambulantne KV rehabilitacije.

Pacijenti i metode: Retrospektivno istraživanje provedeno je u Poliklinici za prevenciju kardiovaskularnih bolesti i rehabilitaciju u Zagrebu. Uključeni su svi pacijenti programa ambulantne KV rehabilitacije u razdoblju od 10. 9. 2015. godine koji su završili program do 29. 9. 2016. godine. Analizirani su demografski podaci. Vodeće indikacije uključena u program su bile akutni koronarni sindrom (*skupina 1*), kardiokirurško liječenje (*skupina 2*) ili srčani implantabilni elektronički uređaji (*skupina 3*). Primjenom HAD-a pacijenti su testirani na početku i na kraju programa. Rezultati su prikazani prema skupinama metodama deskriptivne statistike.

Rezultati: Analiza je provedena ukupno kod 215 pacijenata koji su završili s programom. Najviše uključenih bilo je u skupini 1 (74,9%), zatim slijede skupina 2 (20,0%) i skupina 3 (5,1%). Demografske karakteristike prikazane su u **tablici 1**. Rezultati testiranja primjenom ljestvice HAD na početku i kraju KV rehabilitacije prema skupinama pacijenata, prikazani su u **tablici 2**.

Zaključak: Najviše uključenih pacijenata u program KV rehabilitacije preboljelo je neki od oblika akutnog koronarnog sindroma (AKS). Čak 3 od 4 pacijenta uključenih u program su muškarci. Na završetku rehabilitacije veći broj bolesnika ima normalne vrijednosti nalaza anksioznosti i depresivnosti testiranja primjenom HAD-a, u odnosu na početak rehabi-

Introduction: Cardiovascular (CV) diseases and psychiatric disorders are common problems, not only in the general population, but also in patients enrolled in the CV rehabilitation program. The interaction of anxiety and/or depression on CV disease is not only a barrier to conducting the program, but also significantly affects the outcomes of the program.^{1,2} Therefore, timely diagnosis of cardiac and psychiatric symptoms in patients undergoing CV rehabilitation allows adequate treatment which results in the improvement of the quality of life and outcome of the CV disease. This paper aims to show that early screening by using structured HAD scale (*Hospital Anxiety and Depression Scale*)³ that evaluates anxiety and depression can help us determine the recovery after the outpatient CV rehabilitation program is completed.

Patients and Methods: The Institute for Cardiovascular Prevention and Rehabilitation in Zagreb has conducted the retrospective study. All patients undergoing the outpatient CV rehabilitation program were rehabilitated during the period from 10th September 2015 that completed the program prior to 29th September 2016. Demographic data was analyzed. The leading indicators for the enrollment in the program were acute coronary syndrome (*group 1*), heart surgery treatment (*group 2*) or cardiac implantable electronic devices (*group 3*). By using the HAD scale, the patients were tested at the beginning and end of the program. The results were presented by groups by using the descriptive statistics methods.

Results: The analysis was conducted in a total of 215 patients who completed the program. Most of them were enrolled in group 1 (74.9%), followed by the group 2 (20.0%) and group 3 (5.1%). Demographic characteristics are shown in **Table 1**. The test results by using the HAD scale at the beginning and end of the CV rehabilitation by groups of patients are shown in **Table 2**.

Conclusion: Most patients enrolled in the CV rehabilitation has a history of some form of acute coronary syndrome (ACS). In addition 3 out of 4 patients enrolled in the program are men. On completion of the rehabilitation program, a large number of patients have normal values of anxiety and de-

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litacije, a smanjuje se broj onih s graničnim i patološkim vrijednostima. Ovaj je trend prisutan u skupinama onih s AKS ili su kardiokirurških liječenih, a nije zabilježen u onih s ugrađenim elektroničkim uređajima.

pression test results, by using the HAD scale, compared to the test results at beginning of rehabilitation, whereas the number of those with borderline and pathological values has reduced. This trend is present in the groups of those with ACS or those that underwent heart surgeries, but is not recorded in those with implanted electronic devices.

TABLE 1. Demographic characteristics of patients included in the study.

	Group 1	Group 2	Group 3	All
Men	126 (78.3%)	29 (67.4%)	7 (63.6%)	162 (75.3%)
Women	35 (21.7%)	14 (32.6%)	4 (36.4%)	53 (24.7%)
All	161	43	11	215
Age in years				
(minimum-maximum)	35-81	41-83	50-81	35-83

TABLE 2. Level of anxiety and depression at the beginning and at the end of cardiovascular rehabilitation according to the group of patients.

All (N = 215)						
Hospital Anxiety and Depression Scale	Level of anxiety at the beginning (%)	Level of anxiety at the end (%)	Change in level of anxiety (%) at the end	Level of depression at the beginning (%)	Level of depression at the end (%)	Change in level of depression (%) at the end
Normal	166 (77.2)	189 (87.9)	+14	153 (71.2)	184 (85.6)	+20
Borderline abnormal	32 (14.9)	15 (7.0)	-47	36 (16.7)	18 (8.4)	-50
Abnormal	17 (7.9)	11 (5.1)	-65	26 (12.1)	13 (6.0)	-50
Group 1 (n = 161)						
Normal	126 (78.3)	143 (88.9)	+13	116 (72.1)	141 (87.6)	+22
Borderline abnormal	23 (14.3)	12 (7.5)	-52	27 (16.8)	11 (6.9)	-41
Abnormal	12 (7.5)	6 (3.8)	-50	18 (11.2)	9 (5.6)	-50
Group 2 (n = 43)						
Normal	34 (79.1)	39 (90.7)	+15	31 (72.1)	36 (83.7)	+16
Borderline abnormal	6 (14.0)	2 (4.7)	-33	7 (16.3)	5 (11.6)	-71
Abnormal	3 (7)	2 (4.7)	-67	5 (11.7)	2 (4.7)	-40
Group 3 (n = 11)						
Normal	6 (54.6)	7 (63.7)	+17	6 (54.6)	7 (63.7)	+17
Borderline abnormal	3 (27.3)	1 (9.1)	-33	2 (18.2)	2 (18.2)	0
Abnormal	2 (18.2)	3 (27.3)	+50	3 (27.3)	2 (18.2)	-67

LITERATURE

- Pogosova N, Saner H, Pedersen SS, Cupples ME, McGee H, Höfer S, et al; Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation of the European Society of Cardiology. Psychosocial aspects in cardiac rehabilitation: From theory to practice. A position paper from the Cardiac Rehabilitation Section of the European Association of Cardiovascular Prevention and Rehabilitation of the European Society of Cardiology. *Eur J Prev Cardiol.* 2015;22(10):1290-306. DOI: <http://dx.doi.org/10.1177/2047487314543075>
- Meyer FA, Hugentobler E, Stauber S, Wilhelm M, Znoj H, von Känel R. Depressive symptoms at discharge from rehabilitation predict future cardiovascular-related hospitalizations. *Cardiology.* 2015;131(2):80-5. DOI: <http://dx.doi.org/10.1159/000375231>
- Snaitch RP. The Hospital Anxiety And Depression Scale. *Health Qual Life Outcomes.* 2003 Aug 1;1:29. DOI: <http://dx.doi.org/10.1186/1477-7525-1-29>