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Remote cardiac rehabilitation program conducted in Israel during the coronavirus pandemic

Irene Nabutovsky¹, Yarin Klempfner¹, Daniel Breitner², Alexis Heller², Shoshana Yeshayahu¹, Amira Nachshon¹, Nelly Gang¹, Robert Klempfner^{1,2} ¹Cardiac Prevention and Rehabilitation Institute, Leviev Heart Center, Sheba Medical Center, Tel HaShomer, Ramat Gan, Israel ²Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel

Introduction: The global crisis following the COVID-19 pandemic requires the healthcare system to adapt and adopt new technologies to meet new challenges. With the announcement of the general closure, cardiac rehabilitation centers in Israel were closed and patients were left without regular training and risk factor management. In contrast, the Remote Cardiac Rehabilitation Program (RCRP), which had been developed ahead, continued to function. The purpose of this study was to evaluate the performance of RCRP during the pandemic.

Method: We compared retrospective cohort data on the performance of RCRP patients and care teams over two time periods: (P1) nine weeks during the normal, pre-closure period; and (P2) seven weeks following the commencement of closure. Included in the analysis were parameters of exercise adherence, objective training efficacy, and satisfaction.

Results: The analysis included 38 patients, 92% male, age 58±11 enrolled in the RCRP predominantly following myocardial infarction or coronary interventions (57%). Patient activity during the closure period trended to increase with higher average exercise minutes per week (240 min), as well as exercise minutes performed at the designated target heart rate zone (all p for trend < 0.05). In a mid-study survey, over 86% of patients responded that they felt safe and satisfied with the RCRP.

Conclusion: The RCRP, has proven to be reliable and effective in the face of uncertainty and national crisis. Automation by flexible rules, incorporated in the system, resolved numerous time-consuming tasks, thus allowing for more time to be dedicated to human interaction.

Biography

Irene is a research leader at the Cardiac Prevention and Rehabilitation Institute in middle east's biggest medical center, Tel HaShomer, Israel. She is leading remote cardio rehabilitation study which heavily uses wearable devices, web and mobile applications. Irene works closely and advising various Health-Tech startups. She has completed her PhD at Ariel University, Israel. Irene published several papers and presented her research in conference

k.irishke@gmail.com