

CREATION OF A DIFFERENT LANDSCAPE FOR CARDIOVASCULAR DISEASES AND DIABETES IN EUROPE THROUGH JACARDI JOINT ACTION

PROJEKT SKUPNEGA UKREPANJA JACARDI SPREMINJA OBZORJA NA PODROČJU BOLEZNI SRCA IN OŽILJA TER SLADKORNE BOLEZNI V EVROPI

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ABSTRACT

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The Joint Action on CARdiovascular diseases and Diabetes (JACARDI) aims to reduce the burden of cardiovascular disease and diabetes in European countries, both at the individual and societal levels. The initiative covers the entire patient journey, from improving health literacy and awareness of cardiovascular diseases and diabetes, travelling through primary prevention among high-risk populations and screenings, reaching people living with cardiovascular diseases and diabetes, improving service pathways, self-management, and labour participation. The project involves 21 European countries, 76 partners and plans to implement 142 pilot interventions, ensuring diversity in terms of cultural backgrounds, public health priorities, and healthcare systems.

In Slovenia, interventions will be developed and tested to improve screening for diabetes through community involvement, the involvement of people with diabetes in education programmes in health centres, and the involvement of people with diabetes in a screening programme for diabetic retinopathy. A set of unified, comprehensive and integrated health education materials and approaches will be developed for both healthcare providers and patients referred to the outpatient cardiovascular rehabilitation programme. The effectiveness of the upgraded health education intervention will be tested in a randomized trial. Furthermore, Slovenian experts are involved in developing a harmonized implementation methodology across all 142 pilot interventions, including contextual analysis at the country and pilot levels, multidimensional assessment and evaluation.

JACARDI will enhance cross-national collaboration, maximizing the exploitation of lessons learned through a clear strategy, promoting the integration and sustainability of approaches to achieve high-level impact, including the implementation of effective interaction, cooperation and co-creation between science and policy.

IZVLEČEK

Ključne besede:

sladkorna bolezen
bolezni srca in ožilja
Evropa
intervencije
sodelovanje
trajnost

Projekt skupnega ukrepanja JACARDI je namenjen zmanjšanju bremena bolezni srca in ožilja ter sladkorne bolezni v evropskih državah, tako na individualni kot družbeni ravni. Pobuda zajema celotno pot pacienta, od izboljšanja zdravstvene pismenosti in ozaveščenosti o boleznih srca in ožilja ter sladkorni bolezni, preko ukrepov primarne preventive za osebe z visokim tveganjem in presejanj, doseganja pacientov z boleznimi srca in ožilja in/ali sladkorno boleznijo, izboljšanja zdravstvenih storitev, samooskrbe bolezni ter spodbujanja vračanja na delo. Projekt vključuje 21 evropskih držav, 76 partnerjev in načrtuje izvedbo 142 pilotnih intervencij, ki zagotavljajo raznolikost v smislu kulturnih okolij, prioritet javnega zdravja in sistemov zdravstvenega varstva.

V Sloveniji se bodo razvijale in testirale intervencije za izboljšanje presejanja za sladkorno bolezen z vključevanjem skupnosti, vključevanjem pacientov s sladkorno boleznijo v zdravstvenovzgojne programe v zdravstvenih domovih in vključevanjem pacientov s sladkorno boleznijo v presejalni program za diabetično retinopatijo. Razviti bodo poenoteni, celoviti in integrirani zdravstvenovzgojni materiali in pristopi tako za izvajalce zdravstvenih storitev kot za paciente, napotene v program ambulantne srčno-žilne rehabilitacije. Učinkovitost nadgrajene zdravstvenovzgojne intervencije bo preverjena v randomizirani raziskavi. Poleg tega so slovenski strokovnjaki vključeni v razvoj metodologije izvajanja v vseh 142 pilotnih intervencijah, vključno s kontekstualno analizo na ravni države in pilotne intervencije, večdimenzionalno oceno in evalvacijo.

V projektu JACARDI se bo okrepilo mednarodno sodelovanje, kar najbolj izkoristilo pridobljene izkušnje preko spodbujanja integracije in trajnosti pristopov za doseganje učinkov na visoki ravni, vključno z izvajanjem učinkovite interakcije, sodelovanja in soustvarjanja med znanostjo in politikami.

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1 INTRODUCTION

Non-communicable diseases significantly undermine the health and well-being of the European population, the sustainability of healthcare systems, and social prosperity. Through a usually long natural history, these diseases additionally interfere with economic development, causing productivity losses due to disability in daily work and life for patients, and informal care offered by family, friends and others (1). The main non-communicable diseases are cardiovascular diseases, diabetes, cancer, chronic respiratory diseases and mental disorders (2); they carry about 80% of the disease burden in European Union (EU) countries, which translates into the leading cause of avoidable premature deaths (3). Cardiovascular diseases, mainly myocardial infarctions and strokes, remain Europe's leading cause of death, impacting the lives of more than 60 million Europeans every day, and costing the EU economy 210 billion euros annually (4, 5). Moreover, the number of adults with diabetes has almost doubled over the last decade, reaching over 32 million in 2019 (6).

Hence, it is obvious that managing the growing non-communicable disease burden requires coordinated and integrated action across Europe. The EU Health Programme (EU4H) has therefore set as a key priority the combination of policy actions, research, and concrete interventions to strengthen activities along the entire non-communicable disease patient journey. These include health promotion and primary prevention at the population level, improvements in secondary prevention through timely detection, equal access to high-quality patient-centred healthcare, and an increased uptake of rehabilitation and self-care behaviours (7). As the resources and implementations of comprehensive strategies for the prevention and management of cardiovascular diseases and diabetes vary among countries, and may be further strengthened through collaborative action, the EU4H Programme launched a Joint Action grant under the thematic area of cardiovascular diseases and diabetes (EU4H-2022-JA-03) (7, 8).

2 JACARDI SCOPE AND GENERAL OBJECTIVES

The Joint Action on CARDiovascular diseases and Diabetes (JACARDI) aims to support EU countries in their efforts to reduce the burden of cardiovascular diseases and diabetes along with related risk factors, both at individual and societal levels, while assuring healthcare systems sustainability and equity (8). In particular, JACARDI aims to enhance and promote the implementation of (cross-sectional) best practices, and pilot testing of innovative practices throughout the whole patient journey: addressing healthy people and people at risk of developing cardiovascular diseases/diabetes, along with those already diagnosed with

cardiovascular diseases/diabetes at risk of disease progress and multimorbidity, both at the individual and population levels, and within different settings. JACARDI will begin this journey by improving health literacy and increasing the awareness of cardiovascular diseases and diabetes to reach general and target populations, moving through primary prevention and screening of cardiovascular diseases and diabetes among high-risk populations, then addressing people living with cardiovascular diseases and diabetes and their care providers, developing improved service pathways and (self-)management, also through digital tools, and finally completing the journey by supporting labour participation of people living with these diseases. The journey will also cover transversal and intersectional issues, such as equity in health, health determinants, social, cultural, and ethnic diversity, and the improvement of transnational data availability, quality and accessibility. The activities are divided into 11 work packages, with five transversal work packages, one innovative work package on the development of a common methodological framework and integrative approach, and six technical work packages (8, 9).

JACARDI is coordinated by the Italian National Institute of Health (Istituto Superiore di Sanità – ISS), which has ample experience of participating in and leading projects of similar size and complexity (like Joint Actions CHRODIS, CHRODIS PLUS, ADVANTAGE, JAHEE, PERCH, CARE4DIABETES) (10). The European Commission will support the action for the next four years with 53 million euros of cofunding. JACARDI involves 21 European countries and 76 partners, ensuring diversity in terms of cultural backgrounds, public health priorities, and healthcare systems. The project plans to implement 142 pilot interventions that aim to target millions of people in Europe (7, 8). The wide geographical coverage and extensive pilot implementations are expected to provide a wealth of data for mutual learning and the identification of successful practices. A key feature of JACARDI is the adoption of a common methodology for pilot implementation. This approach aims to harmonize procedures and tools across various fields, from health literacy to patient care pathways. It will benefit the scalability of interventions targeting cardiovascular diseases and diabetes, standardizing the methodological approach of EU healthcare systems. Another core element of the JACARDI project is sustainability. The goal is to ensure that the benefits of JACARDI extend beyond the project's duration, ultimately resulting in the permanent introduction of proven effective solutions into European healthcare systems (8, 9).

3 KEY FOCUS AREAS FOR IMPROVING CARDIOVASCULAR AND DIABETES CARE THROUGH SLOVENIAN JACARDI PILOT IMPLEMENTATIONS

Slovenia is significantly involved in JACARDI action through the work of more than 50 experts in the fields of diabetes, cardiovascular diseases and social sciences, who come from the National Institute of Public Health and University of Ljubljana Faculty of Social Sciences, Faculty of Health Sciences and Faculty of Medicine. Additionally, experts from several different clinical settings will make a key contribution to the pilot implementations (11).

Interventions will be developed and tested to improve screening for diabetes through community involvement, the involvement of people with diabetes in education programmes in health centres, and the involvement of people with diabetes in a systematic screening programme for diabetic retinopathy. A set of unified, comprehensive and integrated health education materials and approaches (12, 13) will be developed for both healthcare providers and patients referred to the outpatient cardiovascular rehabilitation programme. The effectiveness of the upgraded health education intervention will be tested in a randomized trial. Based on modern approaches, an adapted approach for systematic screening for the detection of cardiovascular diseases and diabetes will also be developed. With its international environment, JACARDI offers Slovenian partners inexhaustible opportunities for cooperation in the search and testing of solutions that will be adapted to the Slovenian healthcare system, and also directly applicable during and after the project (9, 11).

The National Institute of Public Health also holds leadership positions together with the Italian National Institute of Health and Finnish Institute for Health and Welfare, linking 11 international teams in developing and facilitating a harmonized implementation methodology across all 142 pilot interventions, including contextual analysis at the country and pilot levels, multidimensional assessment and evaluation, capacity building, learning from other good or validated practices, and consistently applying an equity and diversity lens. Special focus is given to further exploitation of the results of JACARDI when the project ends, by supporting from “day one” the linkage of JACARDI pilot interventions to existing policies and initiatives, identifying and empowering the holders of sustainability and by emphasizing a culture of collaboration and consensus-seeking, thus increasing the potential of JACARDI having a sustainable impact (8, 9, 11).

4 CONCLUSIONS

JACARDI represents an important step forward in the fight against cardiovascular diseases and diabetes in Europe. Its approach prioritizes inclusive solutions to complex public health challenges and the commercial determinants of health, cultural diversity and equality. It has strong policy relevance, as it will support EU countries, including Slovenia, in implementing new evidence-based policies and actions on the prevention of cardiovascular diseases and diabetes, empowerment of patients, and cost-effective disease management. The resulting roadmap of the pilot implementations will operate as proof-of-concept case studies that will be analysed in order to potentially extend and scale up the experience at the regional or national levels, and/or transfer the pilot interventions to other EU countries. Finally, JACARDI will enhance cross-national collaboration to maximize the implementation of lessons learned through a clear strategy, engaging groups of interest, promoting the integration and sustainability of approaches to achieve high-level impacts, including the implementation of effective interaction and co-creation between science and policy (9). Based on all the listed contributions, JACARDI researchers believe that the creation of a different landscape for cardiovascular and diabetes health in Europe can be achieved.

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CONFLICTS OF INTEREST

The authors declare that no conflicts of interest exist.

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ETHICAL APPROVAL

Not applicable.

AVAILABILITY OF DATA AND MATERIALS

Data sharing is not applicable to this article, as no datasets were generated or analysed during the current study.

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