

VIRTUAL MOBILITY (VM) GRANT FINAL REPORT

This report is submitted by the VM grantee to VNS Manager, who will coordinate the approval on behalf of the Action MC.

Action number: COST Action CA18218

VM grant title: *“Infectious disease burden activities across Europe: a systematic literature review of data input sources and methodological design choices”*

VM grant start and end date: 07/10/2021 to 31/10/2021

Grantee name: Periklis Charalampous

Description of the outcomes and achieved outputs

During the first phase of the project (identification of burden of disease activities in the COST region), an e-invitation followed by the study proposal was sent via email to the burden-eu COST Action collaborators. More than 100 burden-eu members responded positively, indicating their willingness to be involved in this phase of the project. In addition, Mr. Periklis Charalampous together with the burden-eu members, built a database of the studies identified.

During the second phase of the project (screening and selection of burden of disease studies and extraction of information), Mr. Periklis Charalampous contacted those members who had expressed an interest in screening of burden of disease studies. Screening was performed twice in collaboration with the burden-eu members who had expressed an interest to contribute. The process strengthened team-working skills such as communication, problem-solving, listening, and networking. Any queries were answered via emails or e-meetings with the group members. Selection of eligible burden of disease studies was evaluated by Mr. Periklis Charalampous and two co-authors from different Near Neighbour Countries (NNC) and International Partner Countries (IPC). Group e-meetings were also scheduled with those expressing an interest to being involved in data extraction. Data extraction for the non-English burden of disease papers was performed by burden-eu native speakers from nine different NNCs and IPCs. During these e-sessions, Mr. Periklis Charalampous discussed and evaluated the extracted items together with the burden-eu participants. Any disagreements about eligibility were resolved by discussion with a third party when necessary, and consensus to include or exclude was reached. The output of the second phase was a file with all burden of disease studies that were performed in the European region that detailed information on methods and data input sources of each study. This file is pivotal for the mapping and

comparison of methods used in, and approaches towards, existing burden of disease activities in the COST region.

Preliminary findings resulting from this systematic literature review will be presented at the 14th European Public Health Conference. An abstract of this project will also be published.

Description of the benefits to the COST Action Strategy

The burden-eu COST Action aims to address challenges in burden of disease estimates and scattered burden of disease landscape in Europe through several planned actions and steps. One of the key steps in addressing these challenges is to map and compare methods used in, and approaches towards, existing burden of disease activities in the COST region. The outcomes and achieved output that result from this Virtual Mobility (VM) grant form the basis of the mapping and comparison of methods used in, and approaches towards, existing burden of disease activities across the COST region. As such, these activities contribute to the key scientific objectives of the burden-eu COST Action. In particular, they will be pivotal for deliverable D-2.1 “Compilation of burden of disease studies in the domain of communicable diseases” of the burden-eu COST Action.

Each of the phases of the systematic literature review will strengthen existing networks by collaboration, offering the opportunity to build new networks, and exchange knowledge on the complexities of burden of disease approaches in a virtual setting. Dissemination is the importing last step, as the resulting report (and thereby the results of one of the deliverables of the burden-eu COST Acton) will be submitted to a peer-review open access journal.

In addition, each activity of the VM grant consisted of collaboration within existing networks as well as with persons outside existing networks, which offered the opportunity to build new networks, and exchange knowledge on the complexities of burden of disease approaches in a virtual setting. This also benefitted the burden-eu COST Action strategy.

Description of the virtual collaboration

During this virtual collaboration, our priority was to use our e-collaboration tools to support all the burden-eu participants as much as possible. Virtual teams are more difficult to lead than face-to-face teams, characterized as they are by physical presence and direct interaction. Bearing in mind these constraints, at the beginning of this VM project collaboration, Mr. Periklis Charalampous asked all the participants to clarify their group-expectations. Thus, several e-practices were built.

First, it should be noted that small group meetings worked better compared to large e-group ones. We also saw that researchers were more aware of each person’s responsibilities, and the tasks that needed to be managed among each group were provided without any delays or misunderstandings. Additionally, the attitude and interaction towards e-small groups was more positive compared to those in e-large group meetings; burden-eu participants felt independence in e-small groups.

Some burden-eu participants felt that online systematic review courses would have benefited the collaboration and would have helped to identify the right people to perform the work. During this online virtual-based collaboration, Mr. Periklis Charalampous provided burden of disease specific reading materials such as e-books, videos, and online quizzes, in order to cover their needs.

Virtual group communication was also a crucial challenge for the burden-eu participants, given that technical problems can hinder effective and smooth team discussions. Although some participants reported problems using the technology, not all felt that the problems impacted their ability to learn about infectious burden of disease methodological approaches. Problems with technology and the resulting time wasted were taken into account beforehand; technical support was provided in each e-session.

Another lesson we learned was the convenience and value of virtual collaboration. Specifically, our VM e-project allowed burden-eu researchers from different NNCs and IPCs to expand their networking and future collaborations. In conclusion, different language skills, or cultural influences or research background and expertise made mutual understanding and building personal relationships more easier via this VM group collaboration.