Scaling-up Packages of Interventions for Cardiovascular Disease Prevention in Select Sites in Europe and Sub-Saharan Africa

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Photo Credit: University of Limpopo, South Africa
SPICES is an acronym that stands for Scaling-up Packages of Interventions for Cardiovascular Disease Prevention in selected sites in Europe and Sub-Saharan Africa. This project aims to implement and evaluate comprehensive cardiovascular disease prevention programmes in sites in Belgium, France, South Africa, Uganda and the United Kingdom. It is an implementation science project funded by the European Commission through the Horizon2020 research and innovation action.
The SPICES project in Belgium moved cardiovascular risk profiling and behaviour change coaching online in May 2020 due to physical distancing recommendations during the COVID-19 pandemic lockdown. Approval was sought from the ethical committee for this adaptation. Participants were informed through the webpage of the local community partner in Antwerp and a promotion event for the online profiling at the community centre. Participants were then asked to complete the online profiling questionnaire. They received an information e-mail and a trained SPICES coach contacted them by phone to discuss their cardiovascular risk profile. The online profiling was piloted for 2 weeks to evaluate its feasibility. This first phase had a low response rate.

During the online profiling, it was challenging to instruct participants on how to measure their waists and hips at home. Also, participant recruitment and retention were low and SPICES Belgium is currently evaluating the implementation by conducting interviews with the participants to improve the future online data collection.

The COVID-19 health crisis may also contribute to unhealthy lifestyle habits, including smoking, unhealthy diets and less physical activity. In order to support vulnerable groups during this period, we developed messages with low-threshold advice and tips, based on existing messages from local public health organizations. The weekly messages were disseminated through the social media channels of community partners such as Buurtwerk ‘t Pleintje. The reach of these messages is evaluated through Buurtwerk’s online metrics such as; post clicks; video views; reactions, comments and shares.

Short videos to support people with limited physical capacities to perform simple work-outs at home are also currently being produced.
Just before the COVID-19 lockdown in March 2020, SPICES South Africa held a seminar to disseminate the results of the main SPICES study in Limpopo to the wider university community, Department of Health officials, clinic managers, CHWs, and other stakeholders. According to this study, 58% of the community members were at low risk of developing a CVD, 33% were at moderate risk, and 9% had a high risk. Despite the national restrictions imposed to curb the spread of COVID-19, the SPICES team has held several virtual project meetings and has also worked on several manuscripts, four of which have now been submitted for publication.

The team has been slowly resuming project field activities since early September.

The South Africa government imposed a nationwide lockdown from the 26 March 2020 which is still in force.
In June 2020, the COVID-19 lockdown in Uganda was lifted and the SPICES project resumed its intervention activities within its communities and health facilities in Mukono and Buikwe districts. Following the COVID-19 ‘new normal’ which requires constant hand washing, wearing of masks and social distancing, the project has provided community health workers (CHWs) with personal protective equipment (PPE) such as masks and hand sanitisers to support their community education outreach on cardiovascular disease prevention. A CHW in Buikwe district narrates their encounter with a community member:

“I have one person who managed to quit smoking completely. He said he was wasting a lot of money on smoking and could smoke a full packet of cigarettes in a day but after our encounter, he went on reducing and reducing and recently when I met him he told me, ‘Musawo [Doctor], thank you for teaching me, I managed to quit smoking and I no longer buy cigarettes anymore.’”

At the health facility, the Project has provided infra-red thermometers to support COVID-19 screening and given healthcare workers face masks and aprons to support infection prevention and control. It should be noted that the distribution and use of PPEs is part of the project’s COVID-19 mitigation plan approved by the ethics committee.

Watch here and read Dr Geoffrey Musinguzi, SPICES Uganda’s Principal Investigator as he discusses findings from a recent project publication and advocates for innovations to deal with cardiovascular disease.

Recent publications


SPICES SUSSEX, UK

Project Makes Progress Despite COVID-19 Lockdown

By Dr. Tom Grice, Research Fellow, University of Sussex

In April 2020, the newly set up SPICES Sussex team has had to adapt the face-to-face coaching model to the physical distancing recommendations put in place due to COVID-19. The team which had begun moving at a good pace saw the research team go from 3 members to 1, and all hard-earned relationships with community organisations came under pressure because of immeasurably bigger problems. Between April 2020 and August 2020, two new part-time members of staff have joined the team and community organisations have become keener to continue working on the progress as government restrictions are becoming normalised. Despite these hurdles, the virtual intervention co-design has been conducted with community members, community health volunteers have been recruited in one site and training for these volunteers commenced mid-September 2020.

Also, research participants were recruited and the virtual intervention started in autumn. 'Getting through 2020 has been stressful, tiring, and sometimes mundane, but we are proud of where we have gotten to and we feel we are well placed to make significant progress through the autumn as the team returns to its full size. Rather than looking forward to a return to normality, we have chosen to accept this new normal whilst attempting to achieve something of note through it’, says the SPICES team at Sussex.

Recent publication


SPICES NOTTINGHAM, UK

Study Redesigned Following Physical Distancing Recommendations

By Mark Bowyer, Nottingham SPICES Project Coordinator

The Nottingham SPICES team has now revised its study design to explore lockdown experiences on participants and their impact on CVD risk through telephone interviews and internet surveys. The amended study design received NTU ethical approval in May 2020. Telephone and internet surveys were resumed in June 2020 with a 23% response rate from the initial SPICES Nottingham participant cohort (n=111/483). It should be noted that between April 2019 and March 2020 the NTU team engaged 483 participants in neighbourhoods through existing community groups, organisations and venues, and in the workplace through large city-based employers. Surveys will be repeated two monthly until December 2020. In March 2020, planned intervention group workshops for phase two of the SPICES study design in Nottingham were halted due to COVID 19 lockdown measures in the UK.

Attention has also now shifted to the qualitative arm of the SPICES study. Six qualitative interviews have been administered with a further 10-15 interviews planned. The semi-structured interviews explore participants’ understanding of the links between personal behaviour and heart health, the extent to which these have been influenced by participation in the SPICES Nottingham study, the barriers and facilitators experienced by participants in their efforts to adopt recommended behaviours, and the extent to which participants are comfortable with an approach to CVD prevention which prioritises personal agency and responsibility.
On the 25th of June 2020, the SPICES team in Brest, France held a planning meeting in Carhaix with their champions to relaunch community engagement activities after COVID-19 lockdown. Before the lockdown, the Brest team had already trained about 17 Volunteer Trainers (Champions) for the community engagement phase of the project. During the Cahaix meeting, these Champions were put in focus groups to discuss the potential facilitators and barriers of restarting community engagement interventions during the pandemic.

On the 24th of September 2020, groups meetings resumed with a lecture on the Dietary Approaches to Stop Hypertension (DASH diet) by the SPICES project coordinator in Brest, Dr Delphine Le Goff and a dietician from the Carhaix cardiology department, Cindy Raja. The seminar which was held at the Manoir de Prévasy in Carhaix-Plouguer and attended by forty participants and the local press was part of efforts to encourage participants to rejoin the community intervention groups.

It should be noted that at the beginning of the behavioural change intervention in Brest in November 2019, 542 participants were randomized with 256 patients in the control group and 264 in the intervention group. At 6 months, 392 participants remained in the study. Champions are now planning their next group meeting which will be held with support from the Brest team and in line with government recommendations on the prevention of COVID-19.

Also read more about the seminar [here](#).