PSY-CA

The PSY-CA consortium started officially on December, 2018, with the aim of conducting a pre-planned meta-analysis of 18 studies to investigate whether psychosocial factors like depression and social support could predict the incidence of cancer. With this newsletter, we want to provide you with information about all that have been achieved to date and the plan for the remaining time (around 1.5 years).

BEHIND THE SCENES

THERE ARE THREE POST-DOCS ON THIS PROJECT WHO HAVE BEEN WORKING HARD IN PSY-CA, AND PERHAPS YOU HAVEN'T HAD THE OPPORTUNITY TO MEET THEM YET...

"I have been working on PSY-CA since December, 2018. Officially, I am the central PI of the project and also the central post-doc for work package 3: Do psychosocial factors predict cancer incidence? Based at the University Medical Center in Groningen, I have regular contact with all the cohorts, and put together the harmonization chapters in the first year. In the last year, I have been finalizing the syntax for the local analysis for work package 3 and supporting the cohorts in running this syntax. Creating this syntax was no easy task! With no R background, I suddenly had to put together syntax that could read all the harmonized data files and generate the output we would need for the meta-analysis (stage 2). However, with help from the experts, we now have a syntax that does exactly that. I am looking forward to starting on the meta-analysis and presenting our findings at conferences!"

LONNEKE VAN TUIJL

"I am a psychologist and epidemiologist and the central post-doc for work package 4, based at UMC Utrecht. The focus of work package 4 is moderation: we will examine whether the relation between psychosocial factors and cancer incidence differs between men and women, young, middle-aged and old persons and between persons with high versus low education. Furthermore, we will study whether persons with psychosocial stress and unhealthy behaviour have a higher risk of cancer than persons who have only psychosocial stress or show only unhealthy behaviour. In the past months I developed the hypotheses, the data-analysis plan and the protocol. My colleague Ina Rissanen and I harmonized the data for four cohorts. In the coming months I will develop the R syntax for the local analyses for work package 4. I cannot wait to see the first results of PSY-CA!"

MAARTJE BASTEN

"I have been working as the central post-doc for work package 5 since December, 2019. This work package investigates whether lifestyle behaviours mediate the association between psychosocial factors and cancer incidence. Based at Amsterdam UMC, VUmc, I also performed data harmonization and local analyses in two cohorts that are based at the same university. During the past months, I have developed hypotheses, analytical strategies and protocol of work package 5. My next task will be preparing the R syntax for the local analysis for work package 5. I am excited to see what we will find in PSY-CA!"

KUAN-YU PAN

ACHIEVEMENT

During 2019, seven studies sought linkage with cancer registries for the very first time. All cohorts have received data about cancer incidences from external registries! For one study, further cancer data is still being requested for participants based in other provinces.

As initially planned, all studies received harmonization chapters at the start of December 2019. Since then, 14 of the 18 studies have harmonized their datasets. The final four are close to finishing the harmonization. Thank you to all those who were involved in harmonizing the data!

Syntax for work package three has been finalized and was disseminated to studies in the last few months. So far, twelve studies have run the syntax and provided the output. Two are showing a number of errors that we're trying to resolve, and four will run the syntax as soon as the harmonization process is completed. Initially, the planning was for the syntax to have run in all studies by the end of March, this turned out not to be feasible hence the delay. However, as the syntax is fully automated requiring minimal input, studies can simply start the syntax and send the output generated. It is anticipated that this minimal input required will limit the number of problems that are caused by the delay.

Lonneke van Tuijl received a prize for best presentation at the 2020 conference of the Association for Researchers in Psychology and Health. Her presentation was entitled: "Psychosocial factors and cancer incidence (PSY-CA): The harmonization and preparation of 18 cohorts for a pre-planned meta-analysis".

All three empirical work packages have been pre-registered on PROSPERO. You can find these if you go to https://www.crd.york.ac.uk/prospero/ and search for "psychosocial factors and cancer incidence"

FUTURE

We are currently working on finalizing the design paper and hope to submit this within a month.

Please take note of the new planning with regards to work package 4 and 5 local analyses (i.e., where studies are expected to run syntax over the harmonized datasets and send the generated output):

In November (2020), studies will start to receive the syntax for WP4, and one month later will receive the syntax for WP5. The initial planning was that local analyses would happen from June to September (2020) for WP4, and from November (2020) to February (2021) for WP5. However, as the amount of work involved for the studies has been greatly reduced by creating syntaxes that can be run over the dataset, the planning has been adjusted so that local analyses for both WP4 and WP5 will have completed in the first months of 2021. This will also provide sufficient time to go through all the generate outcomes and divide these across work packages to create manuscripts that most coherently report the findings.

Please note that additional syntaxes may need to be run because of 1) follow-up analyses due to either initial results or queries from reviewers; and 2) to break down the running time.