



COVID-19 PROJECTS BORN OF THE PANDEMIC!

The health crisis caused by the COVID-19 pandemic, in particular its consequences on public health and the response of various health systems, has generated ideas and opened research paths that involve identifying the virus, sequencing its genome and creating a vaccine, implementing preventative measures, and identifying risk factors, to name but a few. This is true for several research teams within the Canadian Consortium on Neurodegeneration in Aging who have found numerous directions on which to reflect, which were also essential for the pursuit of projects undertaken before the pandemic.

A virtual meeting (as required by social distancing!) with one of these researchers has allowed us to put together a presentation of these new projects and their applications. Here is what she told us.

Isabelle Vedel, co-leader of Team 19 (Research on Organization of Healthcare Services for Alzheimers [ROSA]) has more than one project on her workbench. According to her, the COVID-19 pandemic gives rise to a multitude of questions which we will have to study rapidly in order not only to improve the dispensation of care to the population, but also to prepare for the possibility of another health crisis or the resurgence of the current pandemic, such as China is currently experiencing. Among the projects on which she is working, are included the evaluation of the use of healthcare services and the analysis of deaths due to COVID-19 among people suffering from dementia as well as the organization of healthcare for populations of the Far North.



- **EVALUATION OF THE USE OF HEALTHCARE SERVICES AND ANALYSIS OF DEATHS DUE TO COVID-19 AMONG PEOPLE SUFFERING FROM DEMENTIA**

In cooperation with the Alzheimer Society of Canada, this long-term project seeks to evaluate the number of deaths directly linked to COVID-19, as well as those indirectly linked, such as those that were attributed to other causes, in particular to untreated medical conditions. Indeed, it would seem numerous patients have delayed important appointments for fear of going to a hospital and “catching” the virus. These are generally patients who already have chronic problems (diabetes, hypertension, asthma, etc.) and who need clinical management and regular medical follow-up to maintain their health. In several cases, underlying problems associated with situational anxiety, non compliance with treatments or other factors have led to a deterioration of their health, to cardiovascular problems and to other complications, all of which could necessitate urgent interventions.

The research team will also look into, for example, the use of hospital services, the under- or over-use of emergency services, hospitalisations or admissions to care centres. This study will cover a longer period of time, since the causes of death are not all available and some need to be evaluated or re-evaluated, so as to reveal the possible link with the pandemic (malnutrition, cachexia, etc.). The results will then be compared to previous mortality data.

The team already knows that it will have to take action in order for dementia to be recognized as a risk factor for COVID-19 by showing the increased risk of infection and mortality caused by the fragility of these individuals. Quebec has suffered a truly catastrophic death rate linked to COVID-19 in its Residential and long-term care health centres (*Centres hospitaliers de soins de longue durée* or CHSLDs), institutions where approximately 80% of residents present with a form of dementia. The team has a big job ahead of it: in light of the results of the study, it wants to help protect these fragile patients, offer appropriate services as well as help prepare the health system for the possibility of a future health crisis.



- **ORGANIZATION OF HEALTHCARE FOR CANADA'S ELDERLY IN THE FAR NORTH**

The second research project for Isabelle Vedel's team is to evaluate the implementation of tailored measures concerning Northern habitat, the healthcare services dispensed to the population and the opportunities presented by this pandemic. It has to be emphasized that populations of the Far North, in addition to territorial specificities, have cultural ones that differ greatly from those in the South. Access to healthcare services is limited, but the traditional culture, local community initiatives and contribution of the elders themselves need to be observed under the COVID-19 microscope and can be a source of inspiration for others. When there is a pandemic, the elders are protected by their community and researchers want to see and understand the organization, implementation and deployment of these measures.

All of these research activities will be performed within communities by members thereof (the team is made up of physicians of aboriginal origins, an anthropologist and researchers). This research structure will take into account the specificities and needs of the community while offering to those not familiar with it a better understanding of the realities of life for the populations of remote regions. Several challenges will need to be overcome, in particular the excessive occupation of homes, the implementation of social distancing measures, access to essential resources (water, food, etc.) and healthcare services as a whole.



The research will be conducted among the people living in Quebec's and Ontario's Far North, but Isabelle Vedel's team also wants to work with its colleagues in the CCNA program dedicated to aboriginal populations. If the pandemic were to spread into the communities in the Far North, the results of the research would surely contribute to the rapid implementation of adapted measures which better meet their traditional, cultural and health needs. It is probable that we could also learn from this experience and adapt it to the care centres that look after our own elders, those that have been the most affected by the pandemic.