



**Living Document I: Belgian mental health (care) data repository Version 6
Insights from diagnostic vs non-diagnostic tools**

1/06/2021

Van Hoof, Elke¹; De Laet, Hannah¹; Resibois, Maxime², Gérard, Sylvie³, Dekeyser, Sarah⁴; Loix, Ellen¹; Philips, Evelien¹; Snoeck, Sylvia¹; Maratovna Safiullina, Zamira¹; Dekoker, Benedicte⁵; De Witte, Nico⁵; Lambotte, Deborah⁵; Cruyt, Ellen⁶; Van de Velde, Dominique⁶; Godderis, Lode⁷; Blavier, Adelaïde⁸; Van den Broeck, Kris⁹; Luminet, Olivier⁴; Van den Cruyce, Nele¹

1 Vrije Universiteit Brussel

2 CRéSaM

3 Superior Health Council

4 UCLouvain

5 HOGENT

6 UGent

7 KU Leuven

8 ULiège

9 Uantwerpen

Contact : info.hgr-css@health.fgov.be

Sixth version

Summary status until now:

We aimed to index Belgian studies assessing the impact of Covid-19 on the mental health of our population, and initially started with 169 studies included in the Belgian Mental Health (care) Data Repository (BMHDR). After applying the inclusion criteria described in version 3 (update 2), which are: Belgian data, impact on mental health, non-intervention study, non-small data set study unless similar study with larger dataset available, 94 studies remained. As we are continuously keeping track of new studies, new ones were added, and there are currently 116 studies in the BMHDR. In the last two updates, we analyzed all the different levels of evidence using an adapted version of the Oxford CEBM standard level of evidence and provided an overview of the different studies in those levels of evidence. The levels we are using are, ordered by importance: longitudinal studies, cross sectional panel studies representative of the population, cross sectional panel studies with a convenience sample, Delphi methods, surveys (one-shot questionnaires) representative of the population, surveys (one-shot questionnaires) with a convenience sample, small datasets, and qualitative research.

This is the **sixth version** of the BMDHR of the Superior Health Council, commissioned by the Policy Coordination Working group. In this update, we will make a **distinction between the studies that used diagnostic tools and non-diagnostic tools to allow for a clear overview of the effects on mental health compared to the effects on general well-being**. In the current update, the studies included are of the highest levels of evidence. These levels of evidence concern the longitudinal data, cross-sectional data with a population and a convenience sample.



ATTENTION:

If you yourself, have performed or are performing research on covid-19 and mental health in Belgium and are not yet in the data repository, please do feel free to fill in the Qualtrics for each of the research topics you are working on: [link to Qualtrics](#)

If you know of any additional research performed by other researchers, please do put us in contact with them and send their contact information to the Superior Health Council using the following email address: info.hgr-css@health.fgov.be

1. Overview of studies according to tool used

The studies taken into account in this new analysis consist of the previously analyzed studies in [update 3 \(version 4\)](#) within the highest levels of evidence. A complete updated analysis of all added studies in the different levels of evidence will be provided in the next update. In the overview provided below, the studies are listed per level of evidence, although we will merge the three levels in the analysis of the current update, distinguishing these 18 studies only according to their use of diagnostic tools (8) or non-diagnostic tools (13) – see last column. Diagnostic tools were defined as tools and questionnaires that use the cut-off scores used in the DSM or ICD. Non-diagnostic tools were defined as all the other screeners and questionnaires that measure subjective well-being.

Highest level of evidence	author (alphabetical per type of evidence)	study	contact details	tool
longitudinal	Bruffaerts, Ronny	Leuven college surveys	ronny.bruffaerts@uzleuven.be	Diagnostic
	Bruffaerts R, Mortier P, Voorspoels W, Vilagut A, Jansen L, De Vocht J, Alonso J.	Mental health impact of COVID19 among healthcare professionals in Belgium. The Recovering Emotionally COVID (RECOVER) study.	ronny.bruffaerts@uzleuven.be	Diagnostic
	Cordonnier Aline and Camille Dabé	Past and future thinking in Corona-times	aline.cordonnier@uclouvain.be	Both diagnostic and non-diagnostic
	Galdiolo, & Gaugue	Couple and parental relationships during lockdown	sarah.galdiolo@umons.ac.be	Non-diagnostic
	Lorant V, Broeck K Van den, Gandré C.	Impact of lockdown on psychological and social wellbeing of the population (COVID and I)	vincent.lorant@uclouvain.be	Non-diagnostic
	Marchini, S., Zaurino, E., Bouziotis, J., Brondino, N., Delvenne, V., & Delhayé, M.	Study of resilience and loneliness in youth (18–25 years old) during the COVID-19 pandemic lockdown measures	simone.marchini@ulb.be	Non-diagnostic
	Pabst A, Bollen Z, Creupelandt C, Fontesse S, Pinon N, de Duve M, et al	The impact of the lockdown measurements on the consumption of alcohol and other substances	pierre.maurage@uclouvain.be	Non-diagnostic
	Van Hoof Elke et al	impact of covid19 on the wellbeing of teachers	Elke.Van.Hoof@vub.ac.be	Both diagnostic and non-diagnostic
cross sectional population	Federaal Planbureau	Wellbeing indicators	jmf@plan.be	Non-diagnostic
	Sciensano	5 waves	info@sciensano.be ; rana.charafeddine@sciensano.be	Diagnostic
cross sectional convenience	Bouchat P, Rimé B, Résibois M, DeSmet A, Páez D	How best to promote interpersonal relationships and social integration in the context of Covid-19 physical isolation?	pierre.bouchat@univ-lorraine.fr	Non-diagnostic
	Glorieux, A., P. te Braak, J. Minnen, B. Spruyt	PhD Survey VUB 2020: Analysis of the consequences of Covid-10 on PhD candidates at the VUB	anais.glorieux@vub.be	Non-diagnostic
	Insomnia team & COVID-19 of CHU Brugmann, VUB and ULB	Impact of the second lockdown on sleep	abernack@ulb.ac.be ; olivier.mairesse@vub.be	Non-diagnostic
	Sciensano	3 waves covid and drugs	info@sciensano.be ; rana.charafeddine@sciensano.be	Diagnostic
	Solidaris	Yearly barometer on trust and well-being	Delphine.ANCEL@solidaris.be	Diagnostic
	Vanhaecht Kris	Care together	kris.vanhaecht@kuleuven.be	Non-diagnostic
	Van Hoof Elke et al	Everyone ok	Elke.Van.Hoof@vub.ac.be	Both diagnostic and non-diagnostic
	Vansteenkiste M, Soenens B, Vermote B, Morbée S, Waterschoot J, Klein O, Luminet O, Schmitz M, Van Oost P, and Yzerbyt V.	A questionnaire about well-being during the corona crisis	Maarten.Vansteenkiste@UGent.be	Non-diagnostic



2. Overview of studies according to tool used

2.1 Diagnostic

There are currently **eight studies that used diagnostic tools** in their research. We will first present results regarding mental disorders in general, and then results regarding specific groups.

For mental disorders in general, an increase in mental disorders, as measured with a diagnostic tool, was found in March-April. This increased occurrence of having mental disorders during Covid-19 was also visible in the trend of the months that followed March-April. The proportion of people meeting criteria both for anxiety and depressive disorders followed a similar pattern. In March, both were very high, but started decreasing in April and kept on decreasing until the end of the summer. However, between September and November – when a second wave of Covid-19 took place in Belgium – both anxiety and depression showed an increased occurrence with levels being as high of even higher than they were in March. Anxiety disorders appeared to correlate with the evolution of the number of infections, while depressive disorders appeared to be more related to the restrictive measures taken against the spread of the virus. According to one study, individuals also experienced more suicidal thoughts compared to 2018 and an increase in attempted suicides was reported (0.4% vs 0.2% in 2018). Moreover, a general increase in risk of developing long term problems was found.

For certain groups, slightly different patterns were observed. For example, for students, no differences in suicidality and depression were found in March 2020 compared to previous years, although an increase in anxiety was observed. It was found that health workers with a mental disorder before Covid-19 were 2.8 times more likely to have a mental disorder in March-April 2020. Between June and September, health workers already showed an increase in depressive disorders and anxiety, while for the general population this increase only started in September. Both students and health workers, but also women as well as people between the ages of 16-25 and above 50, have been identified as groups being more at risk of developing mental disorders during the pandemic. However, another study found that people above the age of 65 seem to develop mental disorders less often.

Different risk factors were identified. First, if multiple life areas are affected, the risk of developing a mental disorder increases. In contrast, higher level of education, being able to continue working during the pandemic, social support from friends and family and living with a spouse reduces the risk.

2.1 Non-diagnostic

There are currently 13 studies in the data repository within the highest levels of evidence that used non-diagnostic tools to investigate the general well-being during Covid-19.



Negative affect, psychological distress, sadness, and toxic stress all followed the same pattern as the one observed for anxiety and depression between March and November 2020. During March and April an increase was found with a decrease over the summer months but again an increase before the start of the second lockdown. More specifically for psychological distress, in March and April 47% of individuals were at risk. In June, this number decreased to 32%. In November, when the measures became stricter again, the number of individuals at risk increased to 47%. Resilience and positive affect followed the opposite pattern with a decrease in the first lockdown, a flare up over the summer and again a decrease before the second lockdown. Interestingly, 27% of respondents never reached the threshold for psychological distress.

Insomnia complaints increased from 7-8% before the pandemic to 19% during the first lockdown and even 29% during the second lockdown.

In line with previous updates and the analysis of the diagnostic scales, specific subgroups follow different patterns. For instance, woman and young people are more at risk for different well-being problems such as psychological distress. Moreover, 18–25-year-olds show higher levels of toxic stress compared to older generations. Health workers also show higher negative personal symptoms and even an increase in physical complaints compared to before Covid-19. Isolation, low social support, and low frequency of activities were identified as factors that negatively influence well-being during Covid-19.

As a bright note, not only negative effects have been observed during the pandemic: Couple satisfaction increased during the lockdown.

2.3 Conclusion

The Covid-19 pandemic clearly has a negative effect on the mental health of the population. However, the development of mental disorders is not equal to poor mental health. The distinction made in this update between studies using validated diagnostic instruments inventorying mental health illnesses and those researching general well-being shows that although the general well-being at this moment is poor, the development of actual disorders might be less problematic.

One thing that is notable is that the risk groups and risk factors for mental health problems and general well-being are very similar. Groups at risk are females, young people between the ages of 16 and 25, elderly and health workers. Moreover, having social support as well as not being isolated were identified as protective factors. These risk groups and factors are in line with the two advices ([first advice](#) and [second advice](#)) published by the Superior Health Council Mental Health working group and international literature on the topic.

So far, no complete collapse of mental health has been observed. However, this might only be visible once the pandemic is over.



Attention:

If you yourself, have performed or are performing research on covid-19 and mental health in Belgium and are not yet in the data repository, please do feel free to fill in the Qualtrics for each of the research topics you are working on: [link to Qualtrics](#)

If you know of any additional research performed by other researchers, please do put us in contact with them and send their contact information to the Superior Health Council using the following email address: info.hgr-css@health.fgov.be

DISCLAIMER:

This Belgian mental health data repository is part of the advice of the workgroup 'mental health & covid-19' of the Superior Health Council. It was created on the demand of the Minister of Health as well as the Policy Coordination Working group in order to provide insight of the impact of the pandemic on the Belgian mental health.

Do also take a look at the already published advices by the group:

- Advice nr 9610 Psychosocial care during the Covid-19 pandemic: revision 2021
<https://www.health.belgium.be/nl/node/38685>
- Advice nr 9589 - Mental health and covid-19
https://www.health.belgium.be/sites/default/files/uploads/fields/fpshealth_theme_file/20200520_shc-9589_covid-19_and_mental_health_vweb_0.pdf

Scientific Acknowledgements and personal contributions:

Elke Van Hoof was involved in the creation of the Belgian Mental Health Data Repository, the research question, the research design & the conceptualization, identified studies and data collection, data cleaning, performed all analyses, interpreted the obtained data and was responsible for supervision of the team. She reviewed and edited all updates included in this data repository.

Nele Van den Cruyce was involved in the research design & the conceptualization, the recruitment of studies and data collection, cross-checking, analyses, interpretation, supervision and drafting of all updates in this data repository.

Hannah de Laet was involved in the research design & the conceptualization, the recruitment of studies and data collection, cross-checking, cleaning, analyses, interpretation, drafting of all updates in this data repository.

Olivier Luminet was involved in the conceptualization, data interpretation, supervision and review editing of all updates in this data repository.



Maxime Resibois was involved in the creation of the Belgian Mental Health Data Repository, the research question, the research design & the conceptualization, additional studies identification and data collection, cross-checking, data cleaning and interpretation, supervision and review editing of all updates in this data repository.

Sylvie Gerard was involved in research design & the conceptualization, contacting participants, data cleaning, analyses and provided the scientific secretariat for the data repository group.

Evelien Phillips and Sylvia Snoeck were involved data collection, data cleaning and analyses of data and technical support for the updates in this data repository.

Dekeyser, Sarah and Zamira Maratovna Safiullina were involved in data collection and data cleaning and technical support for all the updates in this data repository.

De Koker, Benedicte; De witte, Nicco and Lambotte, Deborah were involved in collecting data and data cleaning in update 4.

Van den Broeck, Kris was involved in collecting data and data cleaning and the review of update 4 and next.

Cruyt, Ellen; Van de Velde Dominique were involved in the qualitative data analysis in update 4.

Blavier, Adelaïde and Godderis, Lode were involved in the review of update 4 and next.