

## Short Report

# Met and unmet need for mental health care before and during the COVID-19 pandemic

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There is a concern that the coronavirus disease 2019 (COVID-19) pandemic will generate large unmet needs for mental health care. Using data from an epidemiological psychiatric diagnostic interview survey ( $n = 2159$ ) conducted on a probability sample from the general population, the proportions of met and unmet need for mental health care among individuals with and without mental disorders were compared before and during the COVID-19 pandemic. The results showed no statistical difference in met and unmet need for mental health care, but point estimates were suggestive of a higher unmet need for care among those with a current mental disorder after the lock-down period.

## Introduction

There is a concern that the coronavirus disease 2019 (COVID-19) pandemic will have a negative impact on public mental health, and increase the numbers experiencing unmet need for mental health care.<sup>1,2</sup> Although ongoing living systematic reviews have not found a widespread deterioration of public mental health in the first months of the pandemic,<sup>3</sup> anecdotal reports from help-lines and the mental health services continue to receive great media attention. The main message from these sources are generally that they have experienced a surge in help seeking for mental health problems during the pandemic, especially in the lock-down periods. The present report use data from an epidemiological psychiatric diagnostic interview survey that was already ongoing when the pandemic hit Norway.<sup>4</sup> The aim of this survey was to assess prevalence of mental and substance use disorders, and health service use for these disorders, in the general adult population. The first publication on these data showed a significant decline in current prevalence of mental disorders during the Norwegian national lock-down period (mid-March to end May 2020), with prevalence rates returning to pre-pandemic levels after the lock-down.<sup>5</sup> In the present study, we aimed to explore whether the proportion of met and unmet need for mental health care changed between the pre-pandemic period and the first 6 months of the COVID-19 pandemic among (i) individuals with current mental disorders, (ii) individuals with a previous history of mental disorders and (iii) individuals with no history of mental disorders.

## Methods

The participants in the diagnostic interview survey were recruited among adult participants in the Trøndelag Health Survey (HUNT).<sup>6</sup> They were randomly sampled in four drafts throughout the data collection, which lasted from 28 January to 18 September 2020. This makes it valid to compare participating samples at different periods

before and during the pandemic, and 2159 individuals participated (30.8% of those invited). The participation rates were similar throughout the data collection ([Supplementary table S1](#)). The psychiatric diagnostic instrument Composite International Diagnostic Interview 5th version (CIDI 5.0), a standardized interview developed for the World Health Organizations World Mental Health Surveys (WMHS), was used for the data collection.<sup>7</sup> The interviews were conducted either face-to-face or by telephone by trained and certified interviewers. There was no systematic difference in detection of diagnoses between these two interview-modes. More details on the methods is found in previous publications.<sup>5</sup> The project is registered at ClinicalTrials.gov (identifier: NCT04661228), and approved by the Regional Committee for Medical Research Ethics (2017/28/REK-midt).

Mental disorder status was measured as a three-category variable: (i) *current mental disorder* (presence of one or more of the following mental disorders during the past 30 days: major depressive disorder, bipolar type I or type II disorder, generalized anxiety disorder, panic disorder, simple phobia, agoraphobia, social anxiety disorder, alcohol use disorder or drug use disorder), (ii) *previous mental disorder* (lifetime history of any mental disorder mentioned above, but no current mental disorder) and (iii) *no history of a mental disorder*. The mental disorders were operationalized according to diagnostic algorithms developed by WMHS for use on CIDI 5.0.

Met and unmet need for mental health care was operationalized as four mutually exclusive categories. *Ongoing treatment* was defined based on self-reported active treatment (medication or psychotherapy) for mental health problems by either a mental health or substance use professional, or general practitioner, nurse or other general medical provider. *Previous treatment* was categorized if the respondent reported treatment in the past 12 months, and that this treatment was terminated at the time of the CIDI-interview. *Unmet need* was categorized if the participants answered 'yes' to the question on whether they had felt that they might need professional help

**Table 1** Met and unmet need for mental health care by pandemic period among those with current mental disorder, previous mental disorder and no history of mental disorder

	Pandemic periods							
	Pre-pandemic (28 January–11 March)		Lock-down (12 March–31 May)			Post lock-down (1 June–18 September)		
	<i>n</i>	% (95% CI)	<i>n</i>	% (95% CI)	<i>P</i> -value	<i>n</i>	% (95% CI)	<i>P</i> -value
Current mental disorder ( <i>n</i> = 267)								
Ongoing treatment	21	25.4 (16.8–36.5)	24	38.3 (27.1–50.9)	0.105	30	23.3 (16.6–31.7)	0.737
Previous treatment	11	16.2 (9.2–26.9)	10	16.2 (8.9–27.6)	1.000	18	14.8 (9.5–22.3)	0.795
Unmet need	13	14.9 (8.7–24.5)	6	9.7 (4.4–20.0)	0.342	31	25.7 (18.7–34.2)	0.056
No need	38	43.5 (32.9–54.6)	22	35.7 (24.8–48.4)	0.353	43	36.2 (28.1–45.2)	0.313
Previous mental disorder ( <i>n</i> = 846)								
Ongoing treatment	16	7.5 (4.6–12.2)	25	8.9 (6.1–12.8)	0.600	26	7.5 (5.1–10.8)	0.979
Previous treatment	27	13.7 (9.5–19.4)	22	7.7 (5.1–11.5)	0.046	44	12.5 (9.4–16.4)	0.699
Unmet need	27	12.8 (8.8–18.2)	36	12.6 (9.2–17.0)	0.949	42	12.1 (9.0–15.9)	0.810
No need	145	66.0 (59.1–72.3)	200	70.8 (65.2–75.8)	0.268	236	68.0 (62.9–72.7)	0.641
No history of mental disorder ( <i>n</i> = 1043)								
Ongoing treatment	5	1.9 (0.8–4.6)	5	1.4 (0.6–3.4)	0.679	6	1.3 (0.6–2.9)	0.595
Previous treatment	6	2.6 (1.2–5.8)	7	1.9 (0.9–4.0)	0.600	10	2.3 (1.2–4.2)	0.796
Unmet need	10	4.4 (2.4–8.1)	19	5.6 (3.6–8.6)	0.543	31	7.1 (5.0–9.9)	0.147
No need	246	91.1 (86.6–94.2)	314	91.1 (87.6–93.7)	0.997	384	89.3 (86.0–91.9)	0.450
Total sample ( <i>n</i> = 2156)								
Ongoing treatment	42	7.7 (5.6–10.3)	54	7.8 (6.0–10.0)	0.936	62	6.6 (5.2–8.4)	0.476
Previous treatment	44	8.9 (6.7–11.8)	39	5.6 (4.1–7.6)	0.035	72	7.9 (6.3–9.8)	0.514
Unmet need	50	9.2 (7.0–12.1)	61	8.8 (6.9–11.2)	0.815	102	11.5 (9.6–13.7)	0.171
No need	429	74.2 (70.2–77.9)	536	77.8 (74.5–80.8)	0.154	663	74.0 (71.0–76.8)	0.929

Unweighted numbers and weighted proportions with 95% confidence interval (95% CI), and *P*-values of difference between pre-pandemic, and lock-down and post lock-down periods.

for mental or substance use problems in the past 12 months, and also not reported to have received treatment in this period. *No need* was defined as neither receiving nor perceiving a need for mental health care in the past 12 months.

Pandemic periods were defined as *pre-pandemic* period, lasting from the start of data collection (28 January 2020) to 11 March. The lock-down period was defined from 12 March, when the national lock-down was introduced, to 31 May, when a low virus transmission rate had stabilized and restrictions were gradually released. The *post-lock down* period was defined from 1 June to the end of the data collection on 18 September.

Three respondents dropped out during the course of the interview and were excluded from the analyses. There was no missing data on any of the other variables. The samples were weighted for over-sampling of men in the first phase of the data collection. Met and unmet need for mental health care were examined in the pre-pandemic, lock-down and post lock-down periods for individuals with current mental disorder, previous mental disorder and no history of mental disorder using descriptive statistics. The results are presented as unweighted numbers and weighted proportions, with 95% confidence intervals. Statistical difference between the pre-pandemic and pandemic point estimates was tested using corrected Pearson chi-square statistics and Wald statistics on the weighted data.

## Results

Of the 2156 participants, 267 (12.4%) had a current mental disorder, 846 (39.3%) had a previous mental disorder and 1043 (48.3%) had no history of a mental disorder. Demographic and health characteristics among participants in the different pandemic periods are detailed in the [Supplementary table S1](#). Generally, no statistically significant difference was found between the pre-pandemic period and the pandemic periods in the proportions reporting ongoing treatment, unmet need and no need for treatment among those with current mental disorders, previous mental disorders or no history of mental disorders ([table 1](#)). However, compared

to before the pandemic, point estimates and borderline significance *P*-values were suggestive of a higher proportion reporting unmet need for mental health care after the lock-down among those with a current mental disorder (25.7% vs. 14.9%, *P* = 0.056, [table 1](#)). A statistically significantly lower proportion of persons with previous mental disorder reported previous treatment in the lock-down period (7.7% vs. 13.7%, *P* = 0.046).

## Discussion

The present study's main finding is no statistically significant difference in the proportions reporting met and unmet need for mental health care before and during the first 6 months of the COVID-19 in Norway. However, small numbers precludes both robust conclusions and the identification of potentially important subgroups. The fact that the reference period for unmet need was the past 12 months adds a further limitation to the study, and there might be that some participants had the full 12 months instead of the current pandemic period in which they were interviewed in mind when they answered this. Furthermore, results may be vulnerable to participant differences between the pandemic periods. Although the results were weighted, residual confounding may be expected. Despite these limitations, the borderline significant finding of a higher proportion of those with a current mental disorder reporting unmet need for treatment in the post-lock down period versus before the pandemic warrants further investigations. This may be a signal of a potentially important change in access to treatment for mental health problems during the pandemic which should be paid close attention to as the pandemic develops. Sociodemographic characteristics among those experiencing unmet need for mental health care should also be explored in future studies.

## Supplementary data

[Supplementary data](#) are available at *EURPUB* online.

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### Key points

- Met and unmet need for mental health care before and during the first 6 months of the COVID-19 pandemic in Norway was compared between individuals with current mental disorders, a previous history of mental disorders and no history of mental disorders.
- There was no statistically significant difference in proportions reporting met and unmet need for mental health care before and during the pandemic among those with a previous history of mental disorder, nor among those with no history of mental disorder.
- There was no statistically significant difference in proportions reporting met need for mental health care before and during the pandemic among those with a current mental disorder.
- Point estimates and borderline statistical significance were suggestive of a higher proportion reporting unmet need for mental health care after the lock-down period compared to before the pandemic among those with a current mental disorder.

*Conflicts of interest:* None declared.

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