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## Short communication

# Lessons learned from a cross-sectional survey among patients and staff in an acute psychiatric unit during an ongoing pandemic outbreak

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## ABSTRACT

This current cross sectional survey was carried out amongst patients and staff in an acute psychiatric inpatient unit in the very first weeks of the ongoing pandemic outbreak of COVID-19 in Norway. Most patients found the visiting restrictions difficult, many reported that the pandemic made them feel unsafe, affected their sleep and that they feared transmission from other patients. Among staff, almost half were afraid that they would contract the virus, a majority feared they would bring the virus home and infect their family and one third were concerned that the pandemic compromised the treatment provided for the patients.

## 1. Introduction

When COVID-19 emerged in Norway major changes were promptly implemented at the Department of Acute Psychiatry, Oslo University Hospital (OUS) to minimize the risks related to the virus outbreak for patients and staff. Staff went from wearing their own clothes to wearing uniforms, were trained in using personal protective equipment (PPE), triage of patients and testing. One ward previously designated for treating psychotic patients was transformed into a “high risk” ward receiving patients either suspected of having or with confirmed COVID-19. Upon testing negative for the SARS-CoV-2, the patients were transferred to one of the other wards. Staff faced new and complicated ethical challenges, such as testing of patients who were neither able to cooperate or understand why measures such as protective gear and isolation were necessary. Furthermore, major treatment alterations were implemented, no visitors, including next of kin, were allowed inside the hospital premises, and short visits home, previously integral to the therapeutic healing process, were cancelled. Patients with major depression were no longer offered ECT, and the number of beds allocated to high intensive psychiatric care was reduced. Regular in-house meetings were limited to a minimum. Outpatient clinics restricted their services to very few selected patients, and instead provided telephone consultations. At the same time, the rest of Norway went into lock down. Schools, kindergartens and community centers closed overnight and all “non-essential” personnel were urged to work from home.

In this survey, we aimed to gain insight into how staff and patients at an acute psychiatric unit were affected by being in the midst of an ongoing pandemic.

## 2. Methods

The survey was conducted two weeks after the Norwegian society went into lock down on the 12<sup>th</sup> of March 2020. All patients admitted between 01.04.20-17.04.20 and all staff who were on duty were asked to participate. The Department includes five wards with a total of 47 beds: one reception ward where all patients are assessed upon admission, three wards treating psychotic patients and one ward treating patients with affective disorders.

This survey was inspired by a survey conducted during the COVID-19 outbreak in the Sichuan Province in China (Zhou, 2020). It was translated from Chinese to Norwegian by a native speaking resident and adapted to our setting with the help of two user representatives. Both staff and patients included in the survey were able to provide informed consent and understand Norwegian. All responders were given the option to choose whether the data could be used for publication purposes. The survey was approved by the Data Protection Authority at Oslo University Hospital (20/09544).

All patients were asked to fill out a questionnaire including 26 questions designed to identify how they perceived the pandemic and how they felt the pandemic had influenced the treatment. The staff was asked

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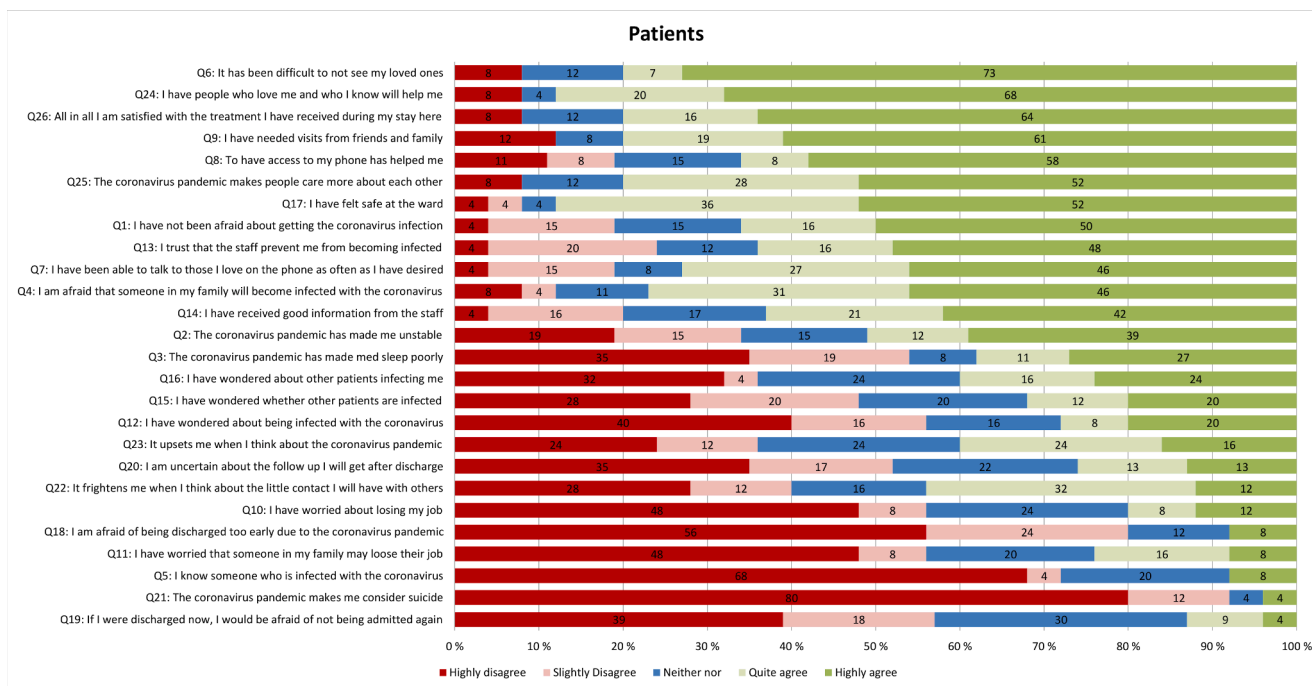


Figure 1. Patient reactions to the COVID-19 pandemic

to fill out a questionnaire including 29 questions concerning their fear of contracting the virus, fear of spreading the virus to their family, fear of dying, about the preparation of the Department and their view on the impact on patient treatment. Both questionnaires were designed as a 5-point Likert scale: 1=I highly disagree, 2=I quite disagree, 3= I neither nor agree, 4= I quite agree, 5= I highly agree. Results are presented with frequency (%) for each option on the Likert scale. Due to skewed data, we applied bootstrap replications for statistical tests and confidence intervals in order to explore potential differences between the wards. Confidence intervals were calculated using percentile bootstrap intervals based on 1000 bootstrap resampling. Significant p-value was set at  $p < 0.05$  for individual analysis. We used SPSS version 25 for statistical analyses.

### 3. Results

During the time of the survey a total of 54 patients (28 women and 26 men) were in treatment. In the same time period in 2019, the number of patients was 72, a drop of 25%. 24 patients answered the questionnaire, 69 % of which were women. A total of 63% were involuntary admitted, 37 % were voluntarily admitted and mean age was 40.3 years (range: 22-69). Patient responses are displayed in Figure 1.

A total of 230 employees were on duty at some point and of these 140 agreed to fill out the questionnaire. Among the responders, 67 % were trained nurses, 26% were physicians or psychologists and 7% were other employees such as mercantile personnel. The distribution according to ward affiliation was as follows; 19 % worked at the reception ward, 40 % worked at one of the two psychosis wards, 16.4% worked at the ward designated to treat patients with suspected COVID-19 and 16.4% worked at the ward treating patients with affective disorders. A total of 18% reported that they had children in kindergarten or at elementary school, while only 7% reported that they at some point had to stay home from work due to the government lock down of schools and kindergartens.

Of particular interest, less than half (44%) feared that they would contract the virus, but slightly more (57%) feared that they would bring the virus home and infect family and friends and many (74%) feared that their loved ones would become sick. Despite this, only 9 % reported that

they did not wish to come to work during the pandemic. Only 18 % had talked to their leader about their fears and even fewer (3%) reported that they had talked to others such as colleagues and/or friends about their fears. However, approximately two third of the staff reported that the management provided good information about the situation (69%) and that the measures taken in order to minimize infection risk were adequate (68%).

The majority of the staff (79%) reported that they thought that their patients took notice of the ongoing pandemic. Of particular concern, one third of the staff (33%) reported that the pandemic rendered them unable to provide adequate treatment for the patients and especially loss of treatment options with ECT and being physically close to patients for comfort was a repeating comment from the staff. The staff affiliated to the affective ward and the COVID-19 ward were significantly less satisfied with the treatment provided for the patients, and staff working in the COVID-19 ward reported poorer sleep, increased fear of contracting the virus, becoming severely ill and fear of dying.

### 4. Discussion

This survey shows that patients at an acute psychiatry department have similar reactions to the pandemic as the general public, finding the lack of contact with others challenging, fearing that family members may be infected and some experience more mental instability and poor sleep (Pfefferbaum and North, 2020; Wang et al., 2020).

Despite changes in treatment options, patients were generally as satisfied with treatment as former surveys have reported from our ward (Færden et al., 2020). However, we found that the majority of patients found it challenging that family and friends were unable to visit them during the admission, which is an important prognostic factor in the process of healing from severe mental disease (Purba et al., 2020).

Patients felt that the staff provided good information, which reflects the response from the staff indicating that they were aware that the patients were distressed by the pandemic. A recent study exploring how psychiatrist and psychiatric nurses in China perceived the situation during the COVID-19 pandemic reported that advanced training in infection control rendered staff more willing to treat and care for psychiatric patients with suspected infection (Shi et al., 2020). In this

survey, staff responded that the implemented infection control measures, such as training and information received from the management, were good, which most likely explains why very few reported in sick despite feeling a reluctance to go to work at the COVID-19 ward.

In line with others we found that staff working in the COVID-19 ward was afraid of contracting the virus, reported poor sleep and fear of becoming severely ill or dying (Liang et al., 2020; Zhang et al., 2020). Yet, disturbingly few had shared their worries to their nearest leader or colleagues. Several studies have highlighted the importance of providing psychosocial support for health personnel putting themselves at risk (Ballesio et al., 2020; Marjanovic et al., 2007), and our results clearly indicate that this should be of focus in psychiatric health care facilities too.

The survey is based on a scale that is not validated and includes some limitations. To ensure complete anonymity, we were unable to gather demographic data such as age, sex and civil status for staff. For the patients, we could not ask for their diagnosis and civil status. Many patients were severely ill with psychosis during the two weeks of the survey and were not able to answer and there might be bias in terms of social desirability. However, the response rate was almost 50 % which is considered acceptable in an acute psychiatric setting (Barkley and Furse, 1996).

This survey conducted among patients and staff in an acute psychiatric unit supports efforts to increase focus on mental health across different levels within the health-care system during this pandemic.

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#### Declaration of Competing Interest

All authors report no conflict of interest.

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