Patients with Borderline and Avoidant Personality Disorders in the Pandemic Their Mental Distress During the Covid-19 Crisis in Norway

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Abstract

Background

Even if people with mental disorders are vulnerable, few authors have studied patients with personality disorders (PDs) in the pandemic. We wanted to examine and compare mental and social distress among patients with borderline PD (BPD) and avoidant PD (AvPD) during the first wave of Covid-19.

Methods

In Summer 2020 a survey was distributed to 1120 patients referred to PD treatment units in Norway, with questions on social situation, mental distress, and changes in mental health after the lockdown. Among 133 responders we studied 40 patients with BPD and 30 with AvPD as their only PD.

Results

70% of the patients in both groups were more alone than before the pandemic, more than 40% felt lonelier, and 50% more aggressive. Both PD groups reported high levels of depression and anxiety, many with suicidal thoughts, and worries about health issues. Several BPD patients reported an improvement in some issues compared to the AvPD patients, with more initiative and energy.

Conclusions

Both PD groups reported increased levels of distress in the first wave of the pandemic. AvPD patients were not less distressed in their social isolation, but a significant group of BPD patients reported less distress in the first months of the pandemic.

Introduction

The Covid-19 pandemic caused a societal lockdown in several parts of the world. In Norway, the official regulations lead to a dramatic restriction of regular outpatient consultations and group treatments within hospitals and mental health services from March 12th 2020. In this health crisis, concerns have been raised about the mental health effects [1–3]. However, the mental and social consequences of the pandemic for PD patients have so far received little attention. In this study we specially focus on patients with BPD and AvPD, their mental and social experiences during the pandemic and possible differences between these diagnostic subgroups.

Salamin and colleagues [4] described an increased feeling of loneliness among BPD patients during the Covid-19 lockdown, despite positive effects of continuing Dialectical Behavior Therapy. Furthermore, a

case-report of a female patient with BPD highlighted feelings of emptiness, abandonment, and enhanced negative feelings about herself and others activated during quarantine and social distancing [5].

Within clinical samples of PD patients, AvPD and BPD are the two most common PD diagnoses [6]. Although they share several aspects of vulnerability, subjective distress, and even co-morbidity with depression and anxiety, they are different regarding social behavior and coping strategies [7]. As far as we know, there are at present no studies specifically involving patients with AvPD with respect to consequences of the Covid-19 pandemic. Persons with BPD often have extensive social contacts and seek peer inclusion [8]. They may experience a strong need for psychological proximity, but nevertheless end up in unstable interpersonal relationships [9]. At the same time, they can be highly sensitive to rejection and social exclusion [10]. In contrast, AvPD has been characterized by withdrawal, isolation, poor psychosocial functioning [11] and high levels of anxiety [12]. Compared to BPD, patients with AvPD have a more detached pattern of attachment in close relations and usually live more isolated than patients with BPD [13]. Furthermore, in an Italian study [14], an avoidant attachment style and discomfort with closeness was associated with less psychological distress during the Covid-19 outbreak. From clinical observation, Demartini and colleagues suggested that patients with difficulties in social interactions and who fear comparison with others might even benefit from a lockdown condition [15]. It is also in line with our impression as clinicians from this period that AvPD patients seldom complain in their confinement. Based on these considerations, we find it likely that AvPD patients would be less troubled during a pandemic crisis. Applied to the focus of the present study, one may expect AvPD patients to be less sensitive to interruption of the treatment contact during the crisis. Such short-term effects are indeed suggested by Moesmann Madsen and colleagues [16]. However, anxiety may nevertheless be high. It is thus noteworthy that AvPD patients may apparently adapt to the confinement situation with invisible distress or even potential harmful behaviors.

Preti and colleagues [7] concluded that PD patients would be especially vulnerable during the pandemic and that reactions would depend on the nature of the personality problems. BPD patients may show stress-related reactions, and hence social distancing might be particularly painful for these patients. On the other hand, they expected that AvPD to be more prone to anxiety, stress reactions and intense worries about health and others' survival. AvPD patients might show more rigidity and intolerance to change, and this might interfere with the need for flexible adaptation to new routines

Aims Of The Study

The primary aim of this study is to investigate and compare the mental and social experiences among patients with AvPD and BPD enrolled in treatment at the Covid-19 lockdown, but as their social approaches are different, we expect reactions to the crisis to differ accordingly.

Material And Method

The current study is based on a cross-sectional survey among patients referred to or in specialized treatment on a specialist mental health service level before March 12th, 2020, and thus captured the first wave of Covid-19 infection in Norway. The survey took place between June and October 2020, in a period with lower levels of infection in the society.

Clinical setting

The treatment units were a part of the Norwegian Network for Personality Disorders which is a cross-national, ongoing clinical and research collaboration of treatment units specialized on treatment for PD [17]. A total of 12 treatment units participated in the study by distributing a total of 1120 invitations and questionnaires to enrolled patients, mainly by postal services.

Ethics approval

The procedures for data collection were approved by the Norwegian Regional Ethics Committee, by local data protection authorities for all contributing units, and approval of data security procedures at the center of the survey (Oslo University Hospital). Patients received written information on the project, and participants filled in the questionnaire and returned it directly, in anonymous form, via postal systems, to the project center.

Participants

A total of 133 patients (response rate 12% of N = 1120) participated in the survey by returning a completed questionnaire in a prepaid mail to the research center. Among these, 40 patients reported having BPD and 30 patients AvPD as their only PD diagnoses. These 70 patients represent the current study sample.

Assessments of diagnoses

The Network provides a standard set of self-report questionnaires for routine evaluation of personality functioning, symptom distress and social/occupational functioning. All therapists are trained in systematic interviews for diagnostic evaluation; MINI for symptom disorders [19] and SCID-5-PD for personality disorders [20]. In the present study, information on diagnoses is based on patients' report in the survey.

The survey

The survey was developed in a multidisciplinary work group consisting of researchers, clinicians, and users, and included quantitative information and open questions for qualitative information on different aspects of patients' mental and social status and perceived change due to the pandemic crises [21]. The present study includes only quantitative data.

Quantitative data in the survey were based on items and questionnaires patients were familiar with from the standard evaluation routines of the Network. Questions included demographic status (age, gender,

family and living situation, occupational situation), exposure to Covid-19, as well as self-harming behaviors, suicide ideation, substance use/abuse, and aspects of isolation. Patients were asked about whether they had attended treatment for PD before March 12th, and if so, which diagnostic group they belonged to, including box-options for different symptom disorders (mood, anxiety, eating, PTSD, OCD, autism spectrum, psychosis, substance use or other disorder), PDs (borderline, avoidant and/or other PD) and a “do not know” option. The survey also included the following self-report instruments:

Depression

Self-reported level of depression was measured by the Patient Health Questionnaire (PHQ-9) [22–24], a nine-item questionnaire with a 0–3 response format from “Not at all” to “Nearly every day”. PHQ-9 scores are computed as the sum score of all nine items, ranging from 0–27.

Anxiety

Self-reported level of anxiety was measured by the Patient Health Questionnaire (GAD-7) [25], a seven-item questionnaire with a 0–3 response format from “Not at all” to “Nearly every day”. GAD-7 scores are computed as the sum score of all seven items, ranging from 0–21.

Anger, aggression and self-harm

The Modified Aggression Scale, (MOAS) [26] is a self-report instrument and the survey included three of the aspects addressed by MOAS; Verbal aggression, Aggression against property, and Physical aggression were measured on a 3-point scale (0–2) with a score range of 0–6.

Changes after March 12th

The self-report questionnaires were supplemented with an additional question asking if any of these aspects (depression, anxiety, anger, etc.) had changed after March 12th, measured on a three-point scale (0–3) from “Better than before March 12th”, “Same as before”, and “Worse than before March 12th”.

Statistics

Data was analyzed by IBM SPSS Statistics for Windows, Release 26 [27]. In the comparison of groups with BPD and AvPD, calculation of between-group differences for categorical variables were based on Crosstabs and Pearson chi-square tests for categorical variables, and for continuous variables T-test for independent samples were used. In tables and text, we have chosen to include exact p-values for statistical comparisons in order to ensure transparency in a situation with multiple comparisons and possible low statistical power.

Results

Patients and treatment situation

Table 1 demonstrates characteristics of the study sample. Female gender dominated in both groups (close to 90%). Forty-three percent of the BPD patients and one third of the AvPD patients were living alone at the time of the survey.

Table 1
Sample description of “pure” BPD and AvPD in the survey

	BPD (n = 40)	AvPD (n = 30)	<i>p</i>
Women	95 %	83 %	0.130
Mean age (SD)	28 (8,5)	36 (10,1)	< 0.001
Living alone	43 %	33 %	0.391
Mood disorder	44 %	72 %	0.018
Anxiety disorder	41 %	59 %	0.151
PTSD	28 %	14 %	0.156
Enrolled in treatment	87 %	90 %	0.717
In group therapy	68 %	93 %	0.009
In individ. therapy	77 %	70 %	0.516

The two PD groups differed in some respects. Patients in the BPD group were, on average, significantly younger than the AvPD group ($p < .001$). Mean age for the BPD group was 28 (SD 9) and 36 years (SD 10) in the AvPD group. There were a significantly higher proportion of patients with comorbid depression in the AvPD group. In the BPD group almost a third had a comorbid PTSD diagnosis, while in the AvPD group, only 14% reported PTSD.

The majority of patients (almost 90%) had started in treatment at the time of the survey, the rest were under pretreatment assessment. Significantly more AvPD patients than BPD patients were enrolled in group therapy (93% vs. 68 %, respectively), while relatively more BPD than AvPD patients reported receiving individual therapy (77% vs. 70%, respectively).

Direct health consequences

No patients confirmed a positive Covid-19 test. None of the AvPD patients believed they had been infected by Covid-19, whereas 13% of the BPD patients did ($p < 0.05$, Table 2).

Table 2
Comparison of survey answers from BPD and AvPD patients during first Covid-19 wave in Norway

Measures	BPD (n)	AvPD (n)	<i>p</i>
Direct health consequences :			
Been in quarantine	25% (10)	14% (4)	0.253
Believed to have/have had Covid-19 infection	13% (5)	0% (0)	0.044
Been tested	15% (6)	7% (2)	0.278
In a risk group	10% (4)	27% (8)	0.075
Knew others with severe Covid-19 disease	10% (4)	3% (1)	0.107
Loneliness, isolation and energy:			
Felt more lonely	43% (17)	43% (13)	0.989
Been more alone	65% (26)	67% (20)	0.884
More difficult to be alone	52% (13)	40% (8)	0.725
Felt more isolated	57% (21)	47% (14)	0.102
Extra energy/more guts	54% (21)	21% (6)	0.006
Anxiety, health worries and depressive distress:			
GAD ≥ 10	68% (27)	70% (21)	0.824
Health-worries	54% (21)	47% (14)	0.704
PHQ-9 ≥ 10	78% (31)	93% (28)	0.072
Suicidality, self-injury and aggression :			
Suicidal thoughts before March 12.th	70% (26)	53% (16)	0.154
Changes in suicidal thoughts	30% (11)	11% (3)	0.075
Suicidal attempts before /after March 12th	8%/8% (3)	0%/0% (0)	-
Self injury before pandemic	50% (19)	20% (6)	0.011
Self-injury after March 12th	41% (15)	14% (4)	0.017
Mean MOAS total score (SD)	1,83 (1,55)	0,87 (0,82)	0.001
MOAS worse than before March 12th	46% (13)	50% (8)	0.820
Drug use, medication and emergency services:			
Current drug use	51% (20)	17 % (5)	0.004

Measures	BPD (n)	AvPD (n)	<i>p</i>
More drug use after March 12th	50% (10)	50% (3)	0.315
Use of medication before March 12th	55% (22)	53% (16)	0.890
Been hospitalized for psychiatric problems	10% (4)	3% (1)	0.284
Emergency consultations for psychological problems	30% (12)	10% (3)	0.044

Twenty-five percent of the BPD group and 13% of the AvPD group had experienced quarantine after March 12th, and a few more in the BPD group were tested and knew people with Covid-19. Twenty-seven percent of the AvPD group and 11% of the BPD group considered themselves in a Covid-19 health risk group. None of these reported differences reached statistical significance.

Loneliness, isolation and energy

As shown in Table 2, experiences of loneliness and isolation were similar in the two groups, and differences were not significant. E.g., about two thirds in both groups had been more alone and nearly 40% in both groups felt lonelier. Half of the patients in the BPD group found it more difficult to be alone, while 40% from the AvPD group reported such difficulty. Even less difference was found on feelings of isolation (53% BPD and 45% AvPD). However, 53% of the BPD patients confirmed experiencing more guts or energy after March 12th as compared to only 21% of the AvPD patients ($p < 0.01$).

Anxiety and health worries

There were few significant differences between the two PD groups with regard to anxiety and health worries (Table 2). Both PD groups reported anxiety at a moderate level (average sum score of 12 on GAD-7), and in both groups around 70% had a sum score of 10 or higher (representing moderate to high levels of anxiety). Approximately half of the patients in both groups reported health worries (for oneself or for close persons).

Twenty-four percent of the BPD group reported a reduction of anxiety symptoms after March 12th, while only one AvPD patient reported this reduction ($p = 0.053$).

Depression

Comorbid diagnoses of mood disorder before the Covid-19 crisis were reported for 44% of the BPD patients and for 72% of the AvPD patients (Table 1). At the time of the survey, the reported levels of depressive symptoms were high in both groups (mean of 15 and 17 on PHQ-9, no statistically significant difference). Seventy-seven percent of the BPD patients and 93% of the AvPD patients scored above threshold (Table 2), indicating moderate to high level of depression. When asked about changes after March 12th, more than one fourth reported an increase in depressive symptoms (Table 3). A larger proportion of patients with BPD reported improvement of depressive symptoms after March 12th ($p < 0.05$, Table 3).

Table 3
Changes reported after March 12th

Issue	Type PD	Better	Same	Worse	<i>p</i> (n = 70)
Loneliness	BPD	25% (10)	35% (14)	40% (16)	0.961
	AvPD	23% (7)	33% (10)	43% (13)	
PHQ-9 depression	BPD	38% (15)	38% (15)	25% (10)	0.031
	AvPD	10% (3)	62% (18)	28% (8)	
GAD-7 anxiety	BPD	24% (9)	45% (18)	31% (12)	0.053
	AvPD	3% (1)	67% (20)	30% (9)	
		Less	Same	More	
Prescribed medic	BPD	43% (9)	52% (11)	5% (1)	0.014
	AvPD	0% (0)	93% (14)	7% (1)	
Self-injury	BPD	8% (3)	21% (8)	10% (4)	0.602
	AvPD	0% (0)	10% (3)	3% (1)	
			Not worse	Some worse	
MOAS aggression	BPD		55% (16)	45% (13)	0.739
	AvPD		50% (8)	50% (8)	

Suicidality, self-injury and aggression

In both subgroups, more than half of the patients reported suicidal thoughts before March 12th (Table 2). Changes in suicidal thoughts after March 12th were somewhat more frequent for BPD patients, although below statistical significance.

Differences in frequencies of self-injury were significant, both before and during the pandemic: Before March 12th, 50% of the BPD patients had self-injured, compared to 20% in the AvPD group ($p = 0.011$). After March 12th, 41% of the BPD patients reported non-suicidal self-injury compared to 14% of the AvPD patients ($p = 0.017$). Only 3 patients reported suicide attempts before March 12th - all three were within the BPD group, and the same three patients reported new suicide attempts after March 12th (Table 2).

Measures of aggression at the time of the survey were significantly higher for BPD patients (1.83) compared to the AvPD group (0.87, $p < .001$). However, differences between the two groups on reported changes of aggression after March 12th were not significant, as half of the patients in both PD groups reported increased aggression after March 12th (Table 3).

Substance use, medication and use of emergency services

Substance use (including alcohol)

Significantly more BPD patients reported drug use than AvPD patients did (51% vs. 17%, respectively, $p = 0.004$). In both groups, half of the users had increased their use after March 12th (Table 2).

Use of medication

More than half of the patients in both groups reported using medication prior to March 12th ($p > .05$, Table 2). Ninety-three percent of AvPD patients used the same level of prescribed medication before and after March 12th. No AvPD patient reported less use of medication, while a larger proportion of patients with BPD (43%) reported a reduction after March 12th (Table 3, $p = 0.014$).

Emergency services

Fifteen patients contacted extra emergency health services (crises telephones, outpatient consultations, and psychiatric hospitals) for additional mental support after March 12th. Among those the proportion of patients with BPD was higher than AvPD (30% vs. 10%, $p = 0.044$). Four BPD patients reported to have been hospitalized after March 12th compared to one patient with AvPD (Table 2).

Discussion

Main findings

The present study aimed to investigate and compare patients with two different types of PD during the Covid-19 crisis. In summary the main findings are:

1. Both PD groups report high level of loneliness and psychiatric symptoms in the first months of the Covid-19 pandemic
2. Differences between patients with BPD and AvPD were not significant with respect to
 - a. reported Covid-19 exposure, (b) social isolation and loneliness, (c) anxiety and health-related anxiety, and (d) levels of depression.
3. BPD patients reported more self-injuring behaviors, higher use of emergency services, problems of aggression, and substance use than AvPD patients, but a significant proportion of BPD patients also reported less symptoms and more energy after March 12th

Low exposure to Covid-19 in both groups

In this first Covid-19 wave, systems for testing were less available, and the reported exposure to Covid-19 was thus also low in both groups. We did expect BPD patients to be more exposed, but this was not confirmed ; nonetheless, tendencies suggested somewhat higher exposure to Covid-19 among BPD patients than AvPD patients. The proportions tested (11% and 7%, respectively) are not unlike the general population frequency (9%) during the first wave in Norway [28]. In fact, this may indicate that BPD

patients do not differ from the general population, but that AvPD patients are somewhat less exposed. The low exposure to Covid-19 in the present study sample contrast other studies indicating higher rates of exposure within psychiatric populations[29] or particularly poor compliance to mitigation measures among cluster B disorder patients [7].

High levels of loneliness and isolation in both groups

Our study demonstrated that feelings of loneliness and experienced isolation did not differ, and both groups reported high levels on these issues. This finding is an interesting corrective to possible clinical assumptions suggesting that AvPD patients would be more comfortable with stay-at-home restrictions during a crisis like this.

High levels of anxiety in both groups

Anxiety levels were generally high within both PD groups and indicated that 70% would have met criteria for Axis-I anxiety disorders. Noteworthy was not only the anxiety level of AvPD patients, which was more expected, but also the high level of anxiety among BPD patients. However, high comorbidity of anxiety disorders in clinical samples of BPD patients has clearly been reported (with prevalence from 68%-88%) [30-31].

High levels of depression with some exceptions

High levels of depression were reported in both PD groups. The levels were markedly higher than recent measures in the general population in Norway after March 12th, where depression rates were more than doubled during the Covid-19 pandemic, an increase from about 10% to 30% [32]. In our study, comparison of self-reported comorbid depression diagnoses before the pandemic, and depression indicated by the self-report PHQ-9 at the time of the survey, would indicate a 20-30% increase in both PD groups. Although these represent different kinds of measurements, the increase is noteworthy in a sample where the prevalence of depression was high in advance. In contrast to this increase in the total sample, our finding that nearly 40% of BPD patients even had a reduction of depression is an exception that may need further studies, possibly a result of ongoing treatment.

Mobilizing energy

Closely related to depression is the feeling of lacking energy or initiative. It is a somewhat surprising result from the BPD patients in this study that several reported less depression, less anxiety, and more energy in the first Covid-19 wave. The reported increase of energy may indicate that BPD patients to a larger extent than AvPD patients manage to mobilize extra resources in such a situation. This finding is perhaps related to the pull-together-effect with a decrease in suicidality described by John and colleagues [33] and also found in Norway in the beginning of a crisis [34]. The long-term effect may reverse, like recently described in Japan [35].

Suicidality, self-injury and aggression

Self-destructive actions were more prevalent among patients with BPD after March 12th, although we did not observe an increase among BPD patients comparing rates before and after March 12th.

Several authors have pointed out the danger of increased suicidality during or after a pandemic [36,37]. In the study by Jepsen and colleagues [36] which was based on psychiatric journals under the Covid-19 crisis, patients with PD diagnoses had the highest frequencies of suicidal themes. Less accessible outpatient clinics during the pandemic and more social isolation may also increase such risk [37,38]. The present study recruited patients where the majority was enrolled in treatment at the time of the lockdown. Treatment units were challenged to organize alternative contact forms as regular outpatient sessions were not accessible. A recent study based on the same survey as the present study, suggests that patients who reported higher risk of self-destructive actions before March 12th were compensated by getting more frequent telephone or video-based sessions after March 12th [39].

Moreover, the study also reveals signs of suicidality among patients with AvPD - more than half of them reported suicidal thoughts. Such problems should not be underestimated among AvPD patients. Other recent studies have pointed to a noteworthy prevalence of self-destructive actions among 57% of patients with AvPD [40].

It is interesting to note that while suicidality and self-harm did not increase, a noteworthy proportion reported an increase of problems with aggression during the pandemic. Self-injury and aggressive behaviors towards others are both aspects included among criteria for the diagnoses of BPD, and it has been suggested that such behaviors are often connected [41]. In our study, AvPD patients also reported more aggression after March 12th.

Substance use, medication and use of emergency services

As expected, we found more use of substances among BPD patients. Substance use here includes alcohol, and the survey could have benefitted from more discriminate descriptions between ethanol and illegal drugs. Nonetheless, that half of the patients increase substance use is still noteworthy and contrasts a European population study covering the first months of the pandemic, which reported a small decrease of ethanol consumption (except in the UK) [42].

An interesting and unexpected finding was that nearly half of the BPD patients reported using less prescribed medication after March 12th, while no patients in the AvPD group reported such a decrease. This finding may be seen together with the finding that several BPD patients reported less mental distress during the first phase of the lockdown.

It was not unexpected that BPD patients used significantly more emergency services than AvPD patients, even when suicidal thoughts were prevalent in both groups. In this study, BPD patients report a more dramatic pattern of coping, also in the Covid-19 crisis, and seem more help-seeking during this crisis. However, we can't assume that AvPD patients are better off under these conditions, even if they may be more quiet and not as dramatic as borderline patients in the clinical setting. They report less use of

emergency instances but suffer in their isolation and may be neglected if not properly followed up. In this situation, AvPD patients may be described as the *invisible patients*, with a risk to be overlooked in times of crisis.

Strength and limitations

The main interest in the present study was to examine differences between the two clinical patient groups, and to our knowledge we are the first to study the effect of the Covid-19 pandemic on these PD groups. The survey was anonymous, and hence not biased by patients' relations to therapists or units or researcher's allegiance to patients, therapists or units.

There are some important limitations. Firstly, the response-rate was low, not least because it rendered a small sample for further investigation of subgroups. Direct comparison of responders and non-responders on clinical measures at the time of the survey [43] was not possible in the current study due to anonymity and ethics regulations. However, responders to the current survey were comparable to other equivalent samples of patients referred to specialized PD treatment units within the Network of Personality Disorder on several measures of severity of symptoms and functioning [21].

The pandemic is an extraordinary situation and we emphasize that this is the first study to examine these themes. Nonetheless, the sample size of $N=70$ in the present study is small, with $n=30$ and 40 in the two groups compared. This will increase the risk of type-II errors in conclusions based solely on statistical significance levels. In example, comparing BPD and AvPD on Suicidal thoughts before March 12.th (Table 2) a difference between 70% and 53% ($p=0.154$) would certainly be statistically significant if they were found in a larger sample. Estimations revealed a power of 0.31 for this analysis, while to be significant with a power of 0.8, the sample size should be of at least 256. Results should therefore be interpreted with due caution, although significant differences detected despite a small sample, are nonetheless noteworthy.

The two investigated subgroups with AvPD and BPD differed in age. However, as a confounder, the impact of age was minimal, as we found no significant connections between age and clinical measures referred to in this study. Also, in this sample, relatively more respondents were living in a partnership compared to our Network sample. This may have biased the results concerning impacts of isolation. In a recent study by Álvaro and colleagues [44], the situation was worse for the BPD patients living alone.

Patients in this survey were asked to label their own diagnosis, and such self-report may represent some uncertainty. Within the Network, procedures explicitly state that the assessment process is a systematic dialogue with the patients and conclusions are discussed directly with the patient. In the study sample, 12% reported that they did not know their diagnosis. The number was comparable to the percentage who reported being under pretreatment assessment. In a survey among psychiatric patients in general [45] it was demonstrated that at least 60% of these patients knew correctly about their diagnosis. It is likely that the percentage is higher in this study sample.

The fact that Norway so far has been less affected by Covid-19 infections and restrictions than many other nations, and that all of the patients were in therapy or soon to be included in therapy, are also factors which may limit the overall generalizability of the results to these PD groups at large. More studies are needed for this purpose.

Conclusion

The present study primarily demonstrates severely elevated levels of distress among patients with AvPD and BPD during the Covid-19 crisis. BPD patients reported an unexpected improvement in some areas. Both patient groups may need follow-up and monitoring of suicidal ideas, depression, loneliness, and anxieties throughout a crisis like this.

Declarations

Ethics approval and Consent to participate

The procedures for data collection were approved by the Norwegian Regional Ethics Committee, by local data protection authorities for all contributing units, and approval of data security procedures at the center of the survey (Oslo University Hospital). Patients received written information on the project, and participants filled in the questionnaire and returned it directly, in anonymous form, via postal systems, to the project center.

Consent for publication

Not applicable

Availability of data and materials

The datasets used and analysed (Questionnaire, SPSS Output files) for the current study are available from the corresponding author on request.

Competing interests

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Authors' contributions

First and corresponding author analyzed data and wrote the original manuscript. Second author especially helped with the data collection and statistics, and last author wrote parts about methods and

helped with language and formulations. The other authors contributed with commentaries or rewriting parts of the manuscript. All authors read and approved the final manuscript.

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