Patients with chronic pain prefer maintenance of pain treatment despite COVID-19 pandemic restrictions

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**Background:**
Worldwide, the COVID-19 pandemic has a significant impact on daily life. First studies describe a negative effect of pandemic stressors on individuals without previous mental illnesses. The home lockdown and the shutdown of pain clinics make it difficult for all patients to get the healthcare they need.

**Objectives:**
The aim of this prospective non-interventional study was to investigate to what extent patients with chronic pain felt affected by the pandemic and its consequences on pain treatment, focussing on the beginning of the outbreak.
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Methods:
149 patients suffering from chronic pain treated at the Interdisciplinary Pain Center were studied over a period of 2 months at the beginning of the pandemic. Data from patient charts and questionnaires were evaluated. Patients were asked about postponements or cancellations of pain therapy, the possible effect on pain levels, depression, anxiety and stress and the impact of intensified hygiene measures. Results were compared to those from standardized and validated questionnaires from the same patients (German version of the depression, anxiety and stress scale = DASS) at time of the first contact in the pain clinic.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
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<tr>
<td>1. Do you agree with the decision made?</td>
<td>Yes ☐ No ☐</td>
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<td>2. Was your medical or therapeutic appointment postponed due to the COVID-19 pandemic?</td>
<td>Yes ☐ No ☐</td>
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<td>3. Did you experience a significant increase in pain during the pandemic?</td>
<td>Yes ☐</td>
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<td>4. During the COVID-19 pandemic, I felt a significant deterioration in mood or fear and / or stress</td>
<td>Yes ☐</td>
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<td>5. This deterioration in mood or increased anxiety and / or stress was triggered by the pandemic</td>
<td>Yes ☐</td>
</tr>
<tr>
<td>6. This deterioration was caused by the fact that the treatment through hygiene measures such as distance control and the wearing of nose and mouth protection could not be carried out effectively enough.</td>
<td>Yes ☐</td>
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The following questions included a scale from 1-10:
3. a. The increase in pain was triggered by the deterioration in mood or the increase in anxiety and / or stress experienced during the pandemic.
3. b. The worsening of the pain was caused by missing or postponing treatment during the pandemic.
3. c. The increase in pain was triggered by the fact that the treatment through hygienic measures such as distance control and wearing a nose and mouth protection could not be carried out effectively enough.

Figure 2: Questionnaire used in the telephone interviews
Results:

84 (56.4%) patients reported cancelled or postponed treatments during the pandemic. Those chronic pain patients with delayed or cancelled treatments reported significantly more pain and psychological distress. The delay or discontinuation of treatments resulted in a deterioration of symptoms. From the patients’ point of view this deterioration was unrelated to the timing of treatment and not secondary to increased hygiene measures. In both groups, patients showed a significant amelioration of the DASS values compared to the values they had at the beginning of treatment, despite the negative effects of the COVID-19 pandemic on care structures. The majority of the patients do not think that the quality of pain treatment was significantly affected by the intensified hygiene requirement.
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Limitations:
The limitations of the study are the small number of patients as a result of the limitation to a short period of time at the beginning of the pandemic and the return rate of 40.2% of the study consents.
The functional status was not assessed, as the patients were only studied by means of a telephone interview.
There are no data concerning further influencing stress factors like job status, social injustice, financial problems, social distancing and lack of care due to the pandemic and their impact on the well-being of the patients.

Conclusions:
Even in the event of a pandemic-related restriction of the care structures, patients with chronic pain benefit from pain therapy. Limitations such as the increased hygiene measures caused by the pandemic were not considered detrimental to the therapeutic measures.
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