Risk of Psychiatric Problems for People with Negative Psychosocial Impacts in Compared to Positive Attitude during Covid-19 Pandemic: A Systematic Review

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Abstract
Introduction: COVID-19 pandemic has negative or positive psychosocial impacts on society. Fear, uncertainty, insomnia, depression, anxiety, and suicide are the negative psychosocial impacts. These psychosocial impacts may cause psychiatric problems. This paper aims to describe the risk of psychiatric problems for people with negative psychosocial impacts in compared to positive attitudes during COVID-19 pandemic.

Methods: This systematic literature review used these keywords: ‘fear’, ‘uncertainty’, ‘COVID-19’, ‘psychiatric problem’ and ‘society’. The search engines used were PubMed and Science Direct. There were 302 papers from PubMed and 134 papers from Science Direct at the beginning. To ascertain the quality of the selection, the process was done twice. Narrative reviews were excluded. Finally, 19 manuscripts were selected for review. PRISMA guidelines were used in the reviewing procedures.

Results: From 18 cross-sectional studies and one randomized control trial, it was found that females and the elderly are prone to anxiety and depression. Other risk factors are low-income, sign of infection, previous contact history with COVID-19 patients, too much information about COVID-19, and pseudoscientific beliefs. Positive protective factors are good self-talk skills, coping strategy mechanisms, compliance with the rules, and a high level of mental resilience.

Conclusion: Anxiety and depression prevention related to Covid-19 can be done through strengthening the positive protective factor and minimize the risk factors. COVID-19 pandemic should be seen as an opportunity to strengthen positive mental attitudes.

Keywords: COVID-19, Psychosocial Impacts, Society, psychiatric problems

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Introduction
The COVID-19 pandemic has psychosocial impacts on society. The psychosocial impacts can be negative or positive. All depends on the characteristics, adjustment, and resilience in facing this new condition. 1 Fear, uncertainty, confusion, insomnia, depression, anxiety, and suicide are the symptoms of the negative psychosocial impacts. Positive psychosocial impacts can be novelty-seeking behavior, new cognitive behavior (new skill mastery), and new positive activities (indoor exercise).2

In a study of 8,806 adults from eight countries/regions, it was found that there were some factors related positively to a probable generalized anxiety disorder

(GAD) and major depressive episode (MDE). Those factors were a weak sense of coherence, isolation, wrong beliefs, younger age, threat perception (for oneself, family, country, or world), authorities mistrust, stigma, financial problem, and too much information about COVID-19. Positive psychosocial impacts can be attained when those factors are minimal. Too much information about COVID-19 can lead to overload and distress. 

Psychosocial impacts affect attention and decision-making ability. Too much information can easily spread positive and negative psychosocial impacts. The reaction depends on the ability to understand and integrate. It is important to identify positive and negative factors contributing to various psychosocial impacts of the individuals. Sociodemographic and sociocultural are the determinant factors. 

Lockdown has forced people to think out of the box. Novelty-seeking might increase the creativity to solve problems. Adjustment to unfamiliar stimuli may increase creativity. The emotional reaction may vary. A longitudinal study in Chinese University Students for six months revealed that stress, anxiety, and depression were decreased by novelty seeking. Researchers did measurement three times, i.e. before the COVID-19 began, during the lockdown, and after the lockdown was over. The results showed that novelty-seeking decreases anxiety, depression, and stress. 

The meaning maintenance model consists of understanding that human beings make meaning and find associations in any situation. When expectations and existing conditions are meaningless, there will be psychological distress. The COVID-19 pandemic disrupts expectations. This might motivate novelty-seeking behavior to maintain expectations and meaningful life. Coherent relations can maintain good mental health. Creativity can help people in restructuring new meaning and removing boredom. It is beneficial in improving mental health. Useful new positive activities are indoor exercises (yoga), music and art, and new skill mastery (cooking, gardening, and online video making). 

The meaning maintenance model has four domains. They are self-esteem, belongingness, certainty, and symbolic immortality. Creative activities can be done to reach those domains. A novel idea, product, cognitive activity, or solution are the answers for those activities. Important characteristics to tackle difficult situations are adaptive, flexible, autonomous, dynamic, open, playful, humorous, divergent thinking, and curious (novelty seeking) in a new situation. Novelty-seeking behavior is related to neurotransmitter and risk-taking activity. Multiple perspectives point of view must be implemented to have a new positive appraisal of any situation. Stress and anxiety during isolation can be minimized by exploring a new idea and finding the positive meaning of any situation. 

Extend capacities and learn new things are developed by novelty-seeking behavior. The positive emotional state is developed through positive novelty-seeking behavior. 

The seeking system comes from the medial forebrain bundle, which is helping someone to have social contact through playing and interaction. Stimulating these areas creates positive emotions and behavior. COVID-19 pandemic forces people not to do activities outdoor. It causes sadness, anger, and fear. Fear is associated with depression and anxiety. Those negative feelings are easily spread. 

Although the vaccine has been developed, there will be new problems with the vaccine and the pandemic itself. This paper aims to describe the psychosocial impacts of the COVID-19 pandemic in society.

**Methods**

**Eligibility criteria**

Criteria are created based on the PICO framework. PICO criteria can be seen in Table 1.
Table 1. PICO Criteria of the Study

<table>
<thead>
<tr>
<th>Patient/population</th>
<th>Communities with negative psychosocial impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intervention</td>
<td>COVID-19 pandemic</td>
</tr>
<tr>
<td>Comparator</td>
<td>Positive attitude</td>
</tr>
<tr>
<td>Outcome</td>
<td>Risks of psychiatric problems</td>
</tr>
</tbody>
</table>

Type of studies
This review included full-text studies in English comparing negative and positive psychosocial impacts during the COVID-19 pandemic. Case reports, letters to the editor, and narrative review were excluded.

Participants
This review included studies with patients of all ages and gender who filled any questionnaire about anxiety, depression, fear, uncertainty, or any psychiatric problems.

Interventions
The intervention was COVID-19 pandemic.

Outcomes
The results investigated in this review were psychiatric problems such as depression, anxiety, suicide, schizophrenia, etc.

Information sources
We used keywords using the Boolean operator. In this study, we used keywords (“fear” OR “uncertainty” OR “psychiatric problem”) AND (society) AND (COVID-19) in PubMed and Science direct databases as search engines to find suitable journals.

Study selection
The study selection began with the removal of duplicate records. The irrelevant studies were excluded by screening the titles and abstracts. Firstly, title and abstract must contain at least COVID-19 keywords with one of the other keywords such as fear or uncertainty or psychiatric problem, or describing about negative and/or positive psychosocial impacts during the COVID-19 pandemic. After that, if the free full text is available in English or Indonesian, then the reading and selection will be continued. Otherwise, it will be removed. Full text screening steps are conducted by reading the abstract and conclusion and examining the type of the text. Case reports, letters to the editor, and narrative reviews were excluded.

Results
Study Selection
Based on the initial search strategy, there were 302 papers from PubMed and 134 papers from Science Direct found. By the title and abstract screening, 399 articles were excluded, which left with 37 relevant studies. Studies that didn’t provide all the information needed were excluded. Finally, there were 19 articles included in the review. PRISMA study flow diagram is described in Figure 1.

Study Characteristics
We included 19 full-text articles which are 18 cross-sectional (prevalence) studies and 1 Randomized Control Trial (RCT). The articles were published in 2020 and 2021. The Joanna Briggs Institute (JBI) score was used to analyze the quality of the studies. The results are provided in Table 2.

There are some negative psychosocial impacts for some vulnerable groups. Besides that, there are also positive attitudes and better characteristics for lowering the risk of psychiatric problems. From 19 studies, most of them used questionnaire about negative psychosocial impacts such as fear, anxiety, stress, uncertainty, and depression. One study used the stigma discrimination and fear scale.

They are negative psychosocial impacts. However, there are four studies used the combination of positive psychosocial impact such as coping strategy and anxiety score as in a study which was conducted by Song et al., study on combination between self-talk questionnaires and coping strategies questionnaires was conducted by Darmichi et. al., combination of COVID-19 fear scale
and health questionnaire by Liang et al, and combination of the fear scale, uncertainty, depression and stress scale with the positivity scale. One study by Gascon et al in Spain used the pseudoscientific belief score.

Discussion

COVID-19 pandemic must be faced and handled with positive thoughts. The strength of those studies was the insights about the positive and negative psychosocial impacts about the COVID-19 pandemic. This paper has limitation for not providing a meta-analysis. Therefore, a meta-analysis to comprehend the positive and negative psychosocial impacts of covid19 should be done. To counter the negative psychosocial impacts, the negative risk factors such as psychosocial must be combined with the positive attitudes. Below are some categorizations of negative and positive risk factors in handling the COVID-19 pandemic.

Negative risk factors

Negative attitudes based on included studies are less knowledge about COVID-19 and feeling uncertain about winning and controlling COVID-19 infection. Schnell and Krampe found that lockdown and crisis of meaningfulness lead to the risk for anxiety and depression. They also assessed the Knowledge, Attitude, and Practice for the COVID-19.

Less favorable demographic characteristics are elderly, obese, and having chronic diseases. Studies about COVID-19 infection revealed that patients with comorbidities and the elderly had a higher mortality rate than the younger ones. This might be the reason why the depression and anxiety scores were higher among the elderly. Female is more prone to anxiety based on an online questionnaire. Overuse phone for COVID-19 news searching gave more negative impacts.
<table>
<thead>
<tr>
<th>No</th>
<th>Author, year, place, study design, JBI score</th>
<th>Number of participants, demographic characteristic</th>
<th>Risk of psychiatric problems measurement (score)</th>
<th>Negative psychosocial impacts/attitude/less favorable demographic characteristics</th>
<th>Positive protective factors / attitude/favorable demographic characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rias et al., 2020 Indonesia, cross-sectional, prevalence study. 6 JBI Score 8/9</td>
<td>1,082 participants (61.1% female)</td>
<td>Depression, Anxiety, and Stress Scale Daily Spiritual Experiences Scale, KAP (Knowledge, Attitude, and Practice)-COVID-19 questionnaire.</td>
<td>Less knowledge about COVID-19, elderly, obese, having chronic disease, uncertainty about winning and controlling COVID-19 infection</td>
<td>Spirituality increases self-control, decreases anxiety score, good knowledge about COVID-19, single, young</td>
</tr>
<tr>
<td>2</td>
<td>Schnell and Krampe, 2020 Germany, Austria, cross-sectional prevalence study. 6 JBI score 8/9</td>
<td>1,538 participants (64.5% female)</td>
<td>Acute COVID-19 stress, meaningfulness and crisis of meaning (SoMe), self-control Depression and anxiety (PHQ-4) score</td>
<td>Lockdown, crisis of meaningfulness</td>
<td>Meaningfulness, self-control, less acute stress for older age, married person, living in a house, active working</td>
</tr>
<tr>
<td>3</td>
<td>Generoux et al., 2020 Canada, United States, England, Switzerland, Belgium, Hong Kong, Philippines, New Zealand, cross-sectional prevalence study. 2 JBI score 8/9</td>
<td>8,806 participants (51.9% female)</td>
<td>Generalized anxiety disorder (GAD) Major depression episode (MDE)</td>
<td>Weak sense of coherence, isolation, wrong beliefs, younger age, threat perception (for oneself, family, country, or world), authorities, mistrust, stigma, financial problem, and too much information about COVID-19 COVID-19, especially from social media and close social circle such as family, friends, or coworker</td>
<td>Strong sense of coherence</td>
</tr>
<tr>
<td>4</td>
<td>Liang et al., 2020 Guangdong, cross-sectional, prevalence study. 7 JBI score 8/9</td>
<td>4,164 college students (48% female)</td>
<td>COVID-19 Fear Scale, Patient Questionnaire Impact of Event Scale-6</td>
<td>Poor perceived mental health status</td>
<td>Monitor, intervention, and coping strategy</td>
</tr>
<tr>
<td>5</td>
<td>Duan et al., 2020 China, Prevalence study, Cross-sectional. 4 JBI Score 8/9</td>
<td>1,390 participants (57.2% female)</td>
<td>Perceived Stress Scale Hostility Subscale Perceived Social Support Scale (PSSS)</td>
<td>Young, financial problem, negative perception</td>
<td>Social support as positive coping strategy</td>
</tr>
<tr>
<td>6</td>
<td>Achral et al., 2020 Europe, North-Africa, Western-Asia and America, Cross-sectional prevalence study. 9 JBI Score 8/9</td>
<td>1,047 participants (54% women),</td>
<td>Depressive symptoms</td>
<td>home confinement causes depressive symptoms</td>
<td>Active and Healthy Confinement Lifestyle</td>
</tr>
<tr>
<td>7</td>
<td>Huang et al., 2020 Hubei, Wuhan, cross-sectional prevalence study. 10 JBI Score 7/9</td>
<td>6261 participants (57.3% female)</td>
<td>Perception of the COVID-19 outbreak, recent preventive or avoidance behaviors, and self-reported mental health scales including the Patient Health Questionnaire and Self-Rating Anxiety Scale</td>
<td>depression and anxiety</td>
<td>protective behaviors</td>
</tr>
<tr>
<td>8</td>
<td>Yan et al., 2020 China, cross-sectional prevalence study. 11 JBI Score 7/9</td>
<td>3,233 participants (54.4% female)</td>
<td>Stress scale and boredom scale</td>
<td>Boredom, emotional distress</td>
<td>Positive coping strategies</td>
</tr>
<tr>
<td>9</td>
<td>Mahmud et al., 2020 Bangladesh, cross-sectional, prevalence study. 12 JBI Score 7/9</td>
<td>246 participants (45.3% female)</td>
<td>Fear of COVID-19 scale Future career anxiety Depression from COVID-19</td>
<td>Depression and anxious</td>
<td>Positive coping strategies</td>
</tr>
<tr>
<td>10</td>
<td>Rogowska et al., 2020 Poland, cross-sectional. 13 JBI Score 7/9</td>
<td>914 participants (43.1% female)</td>
<td>Anxiety and Stress Scale</td>
<td>Female gender, negative coping styles</td>
<td>Physical activity</td>
</tr>
</tbody>
</table>
It increased more anxiety and depression. Sometimes it was called infodemic. Infodemic can cause wrong beliefs and threat perception for oneself, family, country, or world. A weak sense of coherence, isolation, stigma, and financial problem at a long time during the COVID-19 pandemic can cause anxiety and depression. Lower-income and jobless patients increased their level of perceived stress. Isolation and quarantine escalated depression risk. Feeling insecure about the future career had a negative effect on human psychology. The policymaker had to make a special plan to boost up economic growth.

People who had family members or friends getting infected with COVID-19 reported a greater score of anxiety. Therefore, providing truthful information is a must. The perception that COVID-19 can be controlled by protective behavior is related to the lower anxiety scale.

**Positive risk factors (protective factors)**

Positive demographic characteristics for decreasing the risk of...
psychiatric problems during the COVID-19 pandemic were single and young. Younger age has a lower risk of having severe COVID-19 infection. That’s why the depression and anxiety score was lower among them. However, Schnell and Krampe showed that less acute COVID-19 stress was lower for older age, married people, and active workers. This might be due to less outdoor activity needed to be done by the elderly. They can stay at home to reduce the risk of COVID-19 infection.

Positive attitudes for decreasing the risk of psychiatric problems during the COVID-19 pandemic are enhancing spirituality and having good knowledge about COVID-19. Good knowledge means there must be an optimal knowledge. Too much information will lead to anxiety and depression. A strong sense of coherence is also a good protective factor to decrease the risk of depression and generalized anxiety disorder.

Positive coping was associated with a healthier psychological state. A positive coping role is a resilient factor. It is including an adaptive mechanism. Boredom normally happened during isolation and work from home. However, mindfulness training at home can be done as a positive activity. Optimal and proper usage of social media can increase positive coping behaviors. Individual motivation and willingness to adapt to any situation can help in increasing health literacy.

College students also encountered anxiety during the COVID-19 pandemic. They have to study at home. Home confinement can cause depressive symptoms. Monitoring their psychological status is very essential. Coping strategy can be done through seeking psychological help. Social support is very helpful during this pandemic. Active and Health Confinement Lifestyle had to be implemented. Physical activity, satisfaction with life, and task-oriented coping can be done to reduce anxiety. Relaxing and doing hobbies, including spending time in a safe environment with family may decrease the fear to COVID-19.

Early detection and treatment are important to prevent any progression from depression to suicide. Pseudoscientific beliefs are very dangerous. It contains de-realization and depersonalization. Paranoids can develop from excessive information. Ensure information credibility and analyze the information before sharing can prevent misinformation.

Stigma discrimination can develop when someone got COVID-19 infection. This stigma increases the fear of COVID-19. Effective cross-cultural communication is a strategy to prevent stigma. Positive self-talk has a positive relationship with problem-center coping style. It can reduce stigma and depression. Compliance with the rule is one way to reduce the possibility of infection and anxiety.

Conclusion
Anxiety and depression prevention related to Covid-19 can be implemented through strengthening the positive protective factor and minimize the risk factors. Positive protective factors are positive attitude and coping mechanisms towards COVID-19 pandemic. Positive mental strengthening activities can promote good mental health. Therefore, the COVID-19 pandemic should be seen as an opportunity to strengthen the positive mental attitudes.

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The author is only one, therefore all manuscript was written by one people.

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References
2. Genereux M, Schluter PJ, Hung


